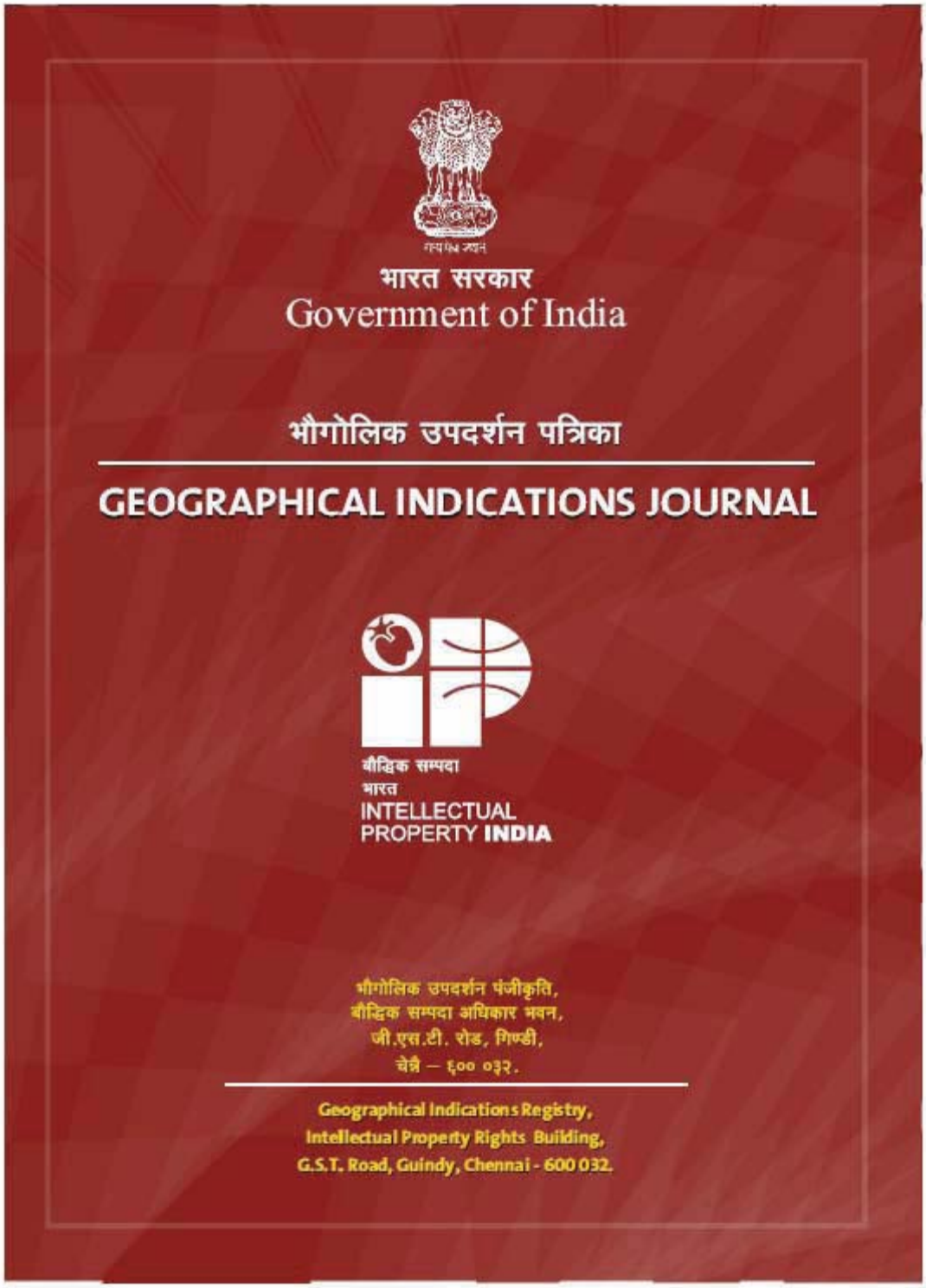
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भौगोलिक उपदर्शन पंजीकृति,
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जी.एस.टी. रोड, गिण्डी,
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Geographical Indications Registry,
Intellectual Property Rights Building,
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GOVERNMENT OF INDIA
GEOGRAPHICAL INDICATIONS
JOURNAL NO. 199

NOVEMBER 29, 2024 / AGRAHAYANA 08, SAKA 1946

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OFFICIAL NOTICES

Sub: Notice is given under Rule 41(1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002.

As per the requirement of Rule 41(1) it is informed that the issue of Journal 199 of the Geographical Indications Journal dated 29th November, 2024 / Agrahayana 08, Saka 1946 has been made available to the public from 29th November, 2024.

NEW G.I APPLICATION DETAILS

App.No	Geographical Indications	Class	Goods
1381	Wada Kolam Paddy Rice	31	Agricultural
1382	Nrusinhawadi Basundi	29	Food Stuffs
1383	Ragi of South Chotanagpur	31	Agricultural
1384	Rugda of Jharkhand	31	Agricultural
1385	Ladakh Nambu/Snambu Textile	24	Textiles
1386	Ladakh Pashmina Textile	24	Textiles
1387	Hoshiarpur Wood Inlay Craft	20	Handicraft

PUBLIC NOTICE

No.GIR/CG/JNL/2010 Dated 26th February, 2010

WHEREAS Rule 38(2) of Geographical Indications of Goods (Registration and Protection) Rules, 2002 provides as follows:

"The Registrar may after notification in the Journal put the published Geographical Indications Journal on the internet, website or any other electronic media."

Now therefore, with effect from 1st April, 2010, The Geographical Indications Journal will be Published and hosted in the IPO official website www.ipindia.nic.in free of charge. Accordingly, sale of Hard Copy and CD-ROM of GI Journal will be discontinued with effect from 1st April, 2010.

Registrar of Geographical Indications

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 868
Application Date: 13- 04-2022

Application is made by The Wirasat Handicrafts Industrial Cooperative Limited at Kashmir Haat (Exhibition Ground), Srinagar, Kashmir – 190 009, Jammu and Kashmir, Indiafor Registration in Part - A of the Register of **Kashmir Namda** under Application No. 868 in respect of Mats and Wall Hangings falling in Class – 27 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The Wirasat Handicrafts Industrial Cooperative Limited

B) Address : The Wirasat Handicrafts Industrial Cooperative Limited,
Kashmir Haat (Exhibition Ground), Srinagar,
Kashmir – 190 009, Jammu and Kashmir,
India

C) Name of the Geographical Indication :

KASHMIR NAMDA

D) Types of Goods : **Class 27**– Mats and Wall Hangings

E) Specification:

Namda, also known as Namdah or Numda, is a traditional piece of pressed wool used as a floor covering, often found in Kashmiri households. The process of making Namda involves felting wool or a combination of wool and cotton into a mat, which is then adorned with intricate chain stitch embroidery using woolen yarn. This beautiful craft has been a part of Kashmiri culture for centuries, contributing to the aesthetic and functional beauty of homes.

The creation of a Namda begins with spreading unspun wool (or a wool-cotton blend) evenly over a mat. The wool is then lightly rolled and pressed underfoot to create felt, a process known as felting, which binds the wool fibers together. Once the wool has been felted into a sturdy mat, it is washed, milled, and dried, preparing it for the final stage: embroidery. Kashmiri Namdas come in various shapes—rectangular, oval, and circular—and their designs are typically inspired by floral, geometric, and sometimes animal motifs. Traditional symbols like the chinar leaf, local flowers, and even bird figurines such as the kingfisher are commonly embroidered onto the felted surface.

The embroidery is done by hand using an Aari (tambour) needle, and the woolen yarn adds richness and texture to the design. The combination of the felted wool's insulating properties and the decorative embroidery makes the Namda an excellent and inexpensive floor covering. In colder areas, it is also used as a mattress due to its warmth and softness.

Namda-making is a highly localized craft in Kashmir, with the entire process—felting, rolling, dyeing, and embroidery—taking place in the downtown areas of Sher-e-Khas, Srinagar and other regions of Kashmir. The tradition is deeply rooted in the culture of the region, and the finished Namdas are cherished not only for their practicality but also for their artistic beauty. They are used both as functional floor coverings and as wall hangings, making them a versatile and cherished part of Kashmiri craftsmanship.

Special Characteristic of Kashmiri Namda:

Hand Felting Process:
Namda is handcrafted by Kashmiri artisans who skillfully felt layers of wool (and sometimes a mix of wool and cotton) to create a thick, dense sheet. This process requires great expertise, as the layers must be evenly pressed and bonded together to form a solid fabric. The artisans' techniques have been passed down through generations, ensuring the craft's authenticity and longevity.

Traditional Tassels (Dashi):
One of the distinctive features of Namdas is the inclusion of Dashi (tassels) between the layers of wool. This design element, developed over time by Kashmiri artisans, adds texture and visual interest to the rug. Creating this effect is a skill that requires a high level of craftsmanship, and it is one of the defining traits that sets hand-felted Namdas apart from machine-made rugs.

Combination of Skills:
The creation of a Namda is a multi-step process involving felting, dyeing, and embroidery. These distinct skills are harmoniously integrated by artisans, who work together to produce a finished product. The embroidery, typically done using chain stitch and Aari needles, often features floral and geometric patterns, showcasing the artisans' creativity and the cultural richness of Kashmir.

Quality of Wool:
The quality of the wool used is essential to producing authentic Namdas. Only the finest local wool is selected to ensure the finished rug is durable, soft, and warm. The wool is sourced from local sheep, and the careful selection process helps maintain the high standards of Kashmiri craftsmanship.

Ideal for Cold Climates:
Due to the dense, felted nature of the wool, Kashmiri Namdas are naturally warm and insulating. They are ideal for use in cold climates, providing both comfort and protection from the chill. In Kashmir, where winters are harsh, Namdas have long been used as floor coverings, mattresses, and even wall hangings for added warmth and decorative appeal.

Thickness and Wool-Cotton Ratio:
The thickness of the Namda and the ratio of wool to cotton are crucial factors that determine its quality and color. A well-balanced wool-cotton ratio ensures that the Namda retains its

structural integrity while offering the desired warmth and softness. The thickness also contributes to the overall aesthetic, making the rug more visually appealing and functional.

Purity of the Material:
For a Namda to be considered of high quality, it must be free from any impurities such as foreign fibers, dust, or waste particles. The wool used must be thoroughly cleaned and processed to ensure it is pure and suitable for felting. This attention to detail is crucial in producing a flawless rug.

Evolution and Global Appeal:
The Namda craft has evolved over time, adapting to modern tastes while retaining its traditional roots. The incorporation of contemporary designs and techniques has expanded its appeal, allowing Kashmiri Namdas to be exported worldwide. The industry continues to be an essential part of Kashmir's handicraft sector, providing livelihoods to many artisans and promoting the rich cultural heritage of the region.

The Kashmiri Namda is not only a functional piece of home decor but also a testament to the enduring craftsmanship of Kashmiri artisans. The hand-felting process, use of high-quality wool, intricate tassel designs, and the fusion of dyeing and embroidery skills make each Namda a unique work of art. With its warmth, durability, and aesthetic beauty, Namda remains a cherished product, both locally in Kashmir and in international markets.

F) Description:

Namda is a piece of mat made by felting of wool or even by mixing a certain proportion of wool along with cotton. A typical Kashmiri Namda is adorned with chain stitch embroidery, with woolen yarn. Kashmiri Namda makes an excellent and inexpensive floor covering and the felted wool rug is also used as a mattress in colder areas. Along with usage as mats Namda is also used as wall decorations

The Namdais made locally and every process required for making is located in vicinity of each other. Currently the craft is confined to the areas of downtown Sher-e-Khas. The warmth provided by the carpet and the beautiful embroidery makes namda one of the desired matting in Kashmir. From felting the wool to rolling, dying and embroidery every step is completed in the heart of Srinagar old city.

The proposed Namda are felted woolen rugs made in Kashmir, these colorful floor mats are made from wool and cotton fiber which have been manually pressed into shape. It is a common winter flooring used in Kashmir and also as decor pieces. It is inexpensive, affordable and long lasting and is made by felting wool. Layers of wool are mixed and felted together to create a thick Rug or Carpet. There are two types of Namdas, plain and embroidered. Namdas are embroidered with colorfulwoolen yarn, to give a touch of beauty and strength. Prices of namdas depend on the intricacy of embroidery, size of carpet and quality of carpet which is determined by thickness and quality of wool.

Prices vary with the percentage of wool. A Namda containing 100% wool is more expensive than one containing 50% cotton. The other supporting raw materials are also gathered locally by the artisans.

Natural wool for felting

Made up of wool the carpet helps to keep warm in harsh winters. The locally sourced wool is the main raw material for the felted rug, other than that locally available soap for binding is used. Wool is known for its warmth, elasticity and its natural crimp which gives warmth and bulkiness. Sometimes cotton is also mixed along with wool but the former affects the quality of Namda. The base colors are shades of brown, yellow, fawn, green, blue etc. The rugs are generally worked all over. The most liked colors are red and white. Felting is a unique property of wool. The physical structure of the outer layer of the wool fiber contributes to the wool's unique property of felting. The scales on the surface open up due to the mechanical action of rolling by artisans. The force of friction and pressure along with heat and moisture causes the scales of the wool fibers to interlock and prevents them from returning to their original position, thus resulting in a felted rug. Naturally twisted wrinkles in the wool fiber adds to the tangling action between fibers. Unlike wool fibers other fibers like cotton and silkdo not have felting properties, and require mixing with wool in a certain composition in order to be felted.

Hand felting

Felting wool is a process which is one of a kind and the process results in products that are unique and organic. Originally felting was based upon the physical characteristics of the pressing technique and scaly structure of the wool fibers that cause the layers to embed and inter mesh and resulting them to be pressed into a compact felted fabric. It takes a full day for the Wasta [lead Namda worker] along with the assistance of three other workers, the thrasher, the presser and the person who helps in the sizing of Namdas, to finish two pieces of Namda.

Traditional matting and decor pieces

The felted rug is used as floor coverings, wall hangings and decor pieces. Along with other Kashmiri handicrafts, Namda craft holds an equal position due to its high export potential. The felted rugs are made by enmeshing wool fibers with water, soap and pressure and then embroidering the resultant fabric. Namdas are extensively used in Kashmiri households as an effective and inexpensive floor covering .Namda are being produced in large numbers in the valley for sale and national urban markets and also in international markets, and thus significantly contributing to the craft industry of Kashmir.

Namdas are generally of small size, with 6 ft. x 4ft. Being the most common size made and sold, which indicates that they are normally used for decoration rather than as floor covering. However, it is used as decorative pieces near beds and tables and the smaller size as door mats. They are mostly used in the winters because of the warmth they provide. 'Namdas' are usually made of a mixture of wool and cotton yarn: the greater the proportion of wool, the more expensive the 'Namda'. One may leave the cotton out, but not the wool. Use of cotton along with wool mainly for bulk production. Besides, cotton gives 'Namda' its strength and durability.

Natural tassels and colors

The Namda rug is made in many shapes like rectangular, oval and the most exotic shape is circular with dashe (wool tassels). The carpets are embroidered heavily and some are kept light and sophisticated. The traditional floral patterns despite being pleasant have been in trend for so long that they have lost all charm over the time. The modern Namdas are a blend of cutworks and patch works and don't have the old patterns or color schemes. Minimal designs and pastel shades are preferred by international customers as well as local consumers. The design evolution of the craft has resulted in many beautiful creations, with peacocks and birds lifting the mood.

In Srinagar, cotton is also mixed with the woolenfibers to create a fabric that is usually white in color and may be easily embroidered with aari in floral patterns or in compositions containing

stylized animal figures. The base colors are shades of brown, yellow, fawn, green, blue etc. The rugs are generally worked all over. The most liked colors are red and white.

Traditional Practice

The Industry is more or less concentrated in the city of Srinagar. There is no factory system in this industry as there are only small units with few men working under one Wasta (the master craftsman). The units usually require only small investments. The importance of this industry is due to the fact that this craft has a very vast employment potential with lesser investment.

G) Geographical area of Production and Map as shown in page no:

The craft of Namda making is mostly prevalent in Rainawari, Soura, Gojwara and Safakadal areas of Srinagar. The craft has been a part of Kashmiri history for a long time. The craft has mini Karkhanas (work stations) that are located in the heart of the city. The art of Namda making is either inherited by the forefathers or is learned under the guidance of Wasta (head artisan). There is no specific community that makes Namda but the art is widespread in parts of Kashmir. The whole process is completed at different areas where felting is done at a separate place and for dyeing and embroidery the rug is sent to RangsazMuhalla and Ali Kadal respectively. There are 2,250 people of 30 Namda Clusters from six districts of Kashmir including Srinagar, Baramulla, Ganderbal, Bandipora, Budgam and Anantnag

About Srinagar

Srinagar is the summer capital of Jammu and Kashmir and situated in the Kashmir region of the Indian subcontinent. The city lies along the banks of the Jhelum River at an elevation of 5,200 feet(1,600 meters) in the valley of Kashmir. Summer capital is situated in the center of Kashmir Valley and is surrounded by five districts.

Srinagar has the distinction of having a multifaceted and unique cultural blend, making it exclusive from the rest of the country, not only from the cultural forms and heritage, but from geographical, demographical, ethical, social entities, which forms a distinct spectrum of diversity. The city is the home to an extraordinary range of social, cultural and economic assets in its traditional knowledge systems, oral traditions, and in the skills of arts and crafts.

The city has a rich living heritage and could be accessed by both land and water. It emerged as a trading post and developed into an urban center. The city was founded during the reign of Ashoka in 250 BC near Pandrethan, and the capital was shifted to the present site around Hari Parbat by Paravasena XI, in the sixth century, known as Parvapura at that time.

Areas/territories/mohallasor city or state of production

The Industry is more or less concentrated in Srinagar city. In this industry, there is no factory system. There are small units only. Though these units require only small investments, turnover and margin of profits are good. There are more than 30 units across Kashmir, located in districts - Srinagar, Baramulla, Ganderbal, Bandipora, Budgam and Anantnag

The importance of this industry is due to the fact that this activity affords very vast employment potential with lesser investment. Against the background of limited avenues for the industrial employment in the valley, the employment. The potential of the craft assumes importance. It is, therefore, essential that proper attention is paid to this sector to generate more employment.

- Nowhatta
- Rainawari
- Soura
- Gojwara
- Safakadal
- Budgam
- Anantnag
- Noupora- ZananaDastkar

Socio- cultural and economical significance of the craft.
The art of Namda making is the peculiarity of Kashmir. Namda making was brought to Kashmir by the Sufi saint, Shah- e- Hamdan, who came with the generous mission of bringing livelihood to the local Kashmiris. They say, give a poor man a fish and you feed him for a day, teach him to fish and you feed him for a lifetime. After so many years Namda making continues to form the livelihood of a significant percentage of the people of Kashmir even to this day. Namda is not only sold locally but the trade was once the backbone of the economic sector of the craft industry of Kashmir. The craft was exported to many parts of the world. The craft flourished and was the source of income for many. The manufacture of Namdas, the Kashmir embroiderers find free scope for displaying artistic imagination and skill. Which represents the scenic beauty and imagination of Kashmiri artists.

The rug not only provides livelihood to the felt makers but also for the dyeing houses, embroidery workers and wool sellers associated with it. The perfect blend of 4 sectors from the historic times to present time and the way they work hand in hand to create a beautiful piece of art. The art of Namda making represents Kashmir at an international level and depicts the creativity and imagination of the region. Though the industry has existed for about 175 years, it was during the Second World War that it got its impetus. There was a setback between 1947 and 1953 on account of unhealthy competition among producers, which led to deterioration of quality.

H) Proof of Origin (Historical records):

Namda has always been a part of the Cultural legacy of Kashmir. Not only as a handicraft but Namda has provided livelihood to a major sector of people. The craft is said to have developed in 11 century during the reign of Mughal Ruler Akbar. During his reign a wise old man named Nubi manufactured a Namda for the King. The namda he created was embroidered and prime motive was to save the King's horse from cold. The word Namda comes from Namada which is a Sanskrit word meaning woolen stuff. Before the 19th century plain Namda was mainly produced in Ladakh and were brought from Central Asia for embroidery in Kashmir. In 1420 it was during the time of Sultan Zainulabdin when the embroidered Namda industry flourished in Kashmir. For these rugs local wool was used. It was in 1850 that Las Khan from Kabul settled his first workshop in Srinagar. The craft later flourished in other parts of the city and the area was named NamdagariMuhalla.

This craft is believed to have been developed in Central Asia around the first century A.D. 'Namdas' were imported in large numbers from Yarqand till the beginning of the 19th century. Central Asian 'namdas' were plain and unadorned. They were imported into Kashmîr and embroidered in the 'jâlik-doozi' style. They were then re-exported to the rest of the world. This trade was at its peak during the First World War. Around 1929, the USA became a major customer.

DN Saraf in his book 'Arts and Crafts, Jammu and Kashmir' mentions that it is estimated that 2,00,000 plain 'namdas' were imported into Kashmîr every year till 1940. Because of this enormous demand, around 1929 the craftsmen of Kashmîr started making namdas locally. In the beginning the number of 'namdas' made locally was small and their quality inferior. In1938, a full-fledged 'namda' industry was set up in Kashmîr. As a result, by 1941 Kashmîr stopped importing 'namdas altogether. Which was just as well, because in 1947 the route to Yarqand was closed off because of the changed political situation.

The majority of designs of the Kashmir embroiderer's art are reproduced or adapted from those on Persian and Turkish carpets, whose fabulous prices and artistic worth are of age-old repute. The original home of these meticulously hand-woven carpets and rugs like the soft velvet and felt ones, seems to have been somewhere in that wide region stretching from the Near East to Sin-Kiang in Central Asia.13

It was in 1918 when the production of Namdah was occupied at Nawab Bazar by a notable firm named KhawajaGarib Shah. Namdah was a woolen felt, a sort of handmade mat with woolen weaving on it or a drugged-like fascinating rug mat which filled in as a story covering or sleeping pad.

Kashmir has always been known for its artistic zeal in historical records from ancient times. Kashmir was a significant unit of the Mughal Empire (1586-1752 AD).

Kashmir did not observe direct Mughal rule till the rule of Mughal ruler Akbar the Great, who visited the valley himself in 158916. Despite the valley being hard to reach, its trade relations with countries like Persia, Bhutan, Nepal, Central Asia, Russia,Bengal and Patna remained excellent. Due to the increasing demand of luxury items by the Mughal nobility and aristocracy the trade flourished tremendously. The route leading to Central Asia via Srinagar remained over busy. The chief commodity of export was shawl. The merchants had monopolized the wool trade in the wool producing regions of Ladakh, Gilgit and Tibet. In addition to the shawl, floor coverings like carpets, dhuries, printed and embroidered sheets were also sold.17 The Mughal triumph was a defining moment in the social, financial, political, and social history of Kashmir. It was amid the period that the Kashmiri shippers, troopers, artists, craftsman and researchers served outside Kashmir. Srinagar had the benefit of being the capital of the region and all things considered it turned into the fundamental focus of all the social developments.

The development of the Namda industry in Kashmir seems to have taken place in the second decade of the last century. Until then artisans were only engaged in the manufacture of Julie felts. Namdas were then imported from Yarkand. Namda the handmade rug with woollen embroidery served as a floor covering or mattress. The rug is made of raw wool and yarn or raw cotton. Ordinarily, Namdas are either black or white. The black remained the same as it was, while the others were dyed blue, green, red and brown. The process of Namda manufacturing is very simple. These are made up layer by layer on a large floor and often tassels of wool are added to make the rug more attractive.

Documentation- Historical references in books

Several gazetteers, published books and records support that Namda has always been a part of the Cultural legacy of Kashmir. Not only as a handicraft but Namda has provided livelihood to a major sector of people.

[https://gaatha.org/Craft-of-India/namda-craft-detail-research/] The craft is said to have developed in 11th century during the reign of Mughal Ruler Akbar. During his reign a wise old man named Nubi manufactured a Namda for the King. The namda he created was embroidered and prime motive was to save the King's horse from cold. The word Namda comes from Namada which is a Sanskrit word meaning woolen stuff. Before the 19th century plain Namda was mainly produced in Ladakh and were brought from Central Asia for embroidery in Kashmir. In 1420 it was during the time of Sultan Zainulabdin when the embroidered Namda industry flourished in Kashmir. For these rugs local wool was used. It was in 1850 that Las Khan from Kabul settled his first workshop in Srinagar. The craft later flourished in other parts of the city and the area was named NamdagariMuhalla.

Arts and Crafts, Jammu and Kashmir - D. N Saraf-1987,Page no: 93-94. This craft is believed to have been developed in Central Asia around the first century A.D. 'Namdas' were imported in large numbers from Yarqand till the beginning of the 19th century. Central Asian 'namdas' were plain and unadorned. They were imported into Kashmîr and embroidered in the 'jâlik-doozi' style. They were then re-exported to the rest of the world. This trade was at its peak during the First World War. Around 1929, the USA became a major customer. It is estimated that 2,00,000 plain 'namdas' were imported into Kashmîr every year till 1940. Because of this enormous demand, around 1929 the craftsmen of Kashmîr started making namdas locally. In the beginning the number of 'namdas' made locally was small and their quality inferior. In1938, a full-fledged 'namda' industry was set up in Kashmîr. As a result, by 1941 Kashmîr stopped importing 'namdas altogether. Which was just as well, because in 1947 the route to Yarqand was closed off because of the changed political situation?

Bashir, J., Arif, A. M., & Khan, O. (2021). Kashmiri Crafts–A Fascination for Tourists. Global Regional Review, VI, 6, 44-48. It was in 1918 when the production of Namdah was occupied at Nawab Bazar by a notable firm named KhawajaGarib Shah. Namdah was a woolen felt, a sort of handmade mat with woolen weaving on it or a drugged-like fascinating rug mat which filled in as a story covering or sleeping pad.

Ahmad, M., MUGHALS and KASHMIR with its ECONOMY (1586-1752 AD), 59 -68. Feb 2017. Due to the increasing demand of luxury items by the Mughal nobility and aristocracy the trade flourished tremendously. The route leading to Central Asia via Srinagar remained over busy. The chief commodity of export was shawl. The merchants had monopolized the wool trade in the wool producing regions of Ladakh, Gilgit and Tibet. In addition to the shawl, floor coverings like carpets, dhuries, printed and embroidered sheets were also sold.

Khazir, N. K. N. (2011). SOCIO-ECONOMIC DEVELOPMENT OF ECONOMIC DEVELOPMENT OF JAMMU AND KASHMIR JAMMU AND KASHMIR (Doctoral dissertation, University of Kashmir, Srinagar). The development of the Namda industry in Kashmir seems to have taken place in the second decade of the last century. Until then artisans were only engaged in the manufacture of Julie felts. Namdas were then imported from Yarkand. Namda the handmade rug with woollen embroidery served as a floor covering or mattress. The rug is made of raw wool and yarn or raw cotton. Ordinarily, Namdas are either black or white. The black remained the same as it was, while the others were dyed blue, green, red and brown. The process of Namda manufacturing is very simple. These are made up layer by layer on a large floor and often tassels of wool are added to make the rug more attractive.

Specific references- Old pictures with Namda

- 1905, Hindu High school -later named as SAP school and college- MaharajPratap Singh and Raja Amar singh seated with British president with Namda in front- Photo by- DewanAlim Chand.
- 1926, Kashmiri artist women sitting on Namda at Shalimar- Photo by Herford Tynos cowling.
- 1942,Namda Embroidery karigar - Photo by P.Gerris.
- 1956,Namda Embroidery karigar -Photo by P.K Bamzai.
- 1921 Namda Drying at Kaksarai Photo by R.C Mehta.
- Making NamdaPg 212- 1941 A Namda Designer- Photo by R.C Mehta- Arts and Crafts, Jammu and Kashmir: Land, People, Culture- D.N. Saraf 1987.
- 1953 Kashmiri boys embroidering a rug - Photo by Keystone Features- PIB Kashmir book.
- An 1868 picture from Library of France showing a Kashmiri Sufianan music band comprising men and women, sitting on Namda- Photo by John Burke , William Baker.
- 1890 Old Namda embroidery picture.
- 1870 Indian Nautch Girls from Kashmir, sitting on Namda.
- India's first Prime Minister, Jawaharlal Nehru, giving a speech in Srinagar, Kashmir, welcoming Jammu and Kashmir into the Indian Union, 2 November 1947 (Sheikh Abdullah is seated to his left)
- 1934 Namda rug vendor in a Shikara

I) Method of Production:

Raw Material and Tools - Felting

The raw material used to make Namda is available abundantly in local areas of Kashmir. Stage1 of production is when namda is felted and the basic raw material for this part is wool

Wool

The journey of Namda does not start with wool carding or felting but from the arrival of spring in the month of March and April when the wool is sheared. The wool is also shared for the second time which is in autumn from the month of September to November and is procured in winters.

The wool is sourced locally from the markets of Ganderbal and Sonmerg and Yusmerg. Wool outsourced from these areas is considered to be of best quality and is available at good prices. The Karigars stock up and have a lot of wool piled up according to the usage. The wool sourced is either processed which is free from impurities or brought raw without being carded. The latter is used for finishing touches. The price of wool ranges for Rs100. The carding is either done with a machine or with a hand. For the latter Duen is used. Duen is a special type of tool which is hung from the ceiling and wool is constantly banged with the help of Dast which helps to separate the impurities from wool. Mostly the machine carded wool is preferred as it is less laborious and cheap. The carded wool is sourced from Ganderbal.

Tools and Product - Felting

- Trakir
- Saban
- Mat or Wagguv
- Willow stick
- Panje
- Water can
- Mazan
- Raz

- Running tap or water source

Trakir - weighing scale
The trakir (weighing scale) is used to weigh the quantity of wool that is required for felting
For this step local cans or any readily available container is also used, however earlier the basic kashmirinaari (jug) was used.
Mazan - Broom
Mazan is a broom which is used to sprinkle soapy water on the layers of wool. The special broom is made up of dried bushes and was earlier used as cleaning brooms in mud houses.
Raz - Rope
Raz is any rope which is required to tie the namda after rolling. Any strong rope is used which can hold the rolled namda together.
Water
A running tap is required to wash Namda which helps it to get rid of extra soapy.

Raw material and tools - Dyeing
Colors
Water bath

Colors
Colors are usually the local dyes and shades are prepared by the master himself,who is well versed with the proportions of colors to be mixed for attaining a specific shade. Dyes usually used are zard (yellow) sabaz (green) ferozi (blue) nun zard (orange) coffee (brown) gulaeb (pink) Maroon (deep red). Out of these maroon and basic off white is preferred most.

Water bath
The color bath tub is a massive structure which has a copper handi for holding water and namda. Beneath the water bath there is a fire burning continuously to keep the water boiling. Along with colors diluted battery acid is also added so as to retain the color.

Raw material and tools - Embroidery
- Tracing paper
- Washable ink
- Wool yarn
- Aari

Tracing paper
Tracing paper is used to trace the beautiful patterns on Namda. The practice was earlier done with the help of wooden blocks that had patterns carved in. The block was dipped in ink and printed on the namda. Nowadays a tracing sheet is used which has designs drawn on them and small holes poked in for the ink to print on Namda.

Washable ink
Tracing paper is used to trace the beautiful patterns on Namda. The practice was earlier done with the help of wooden blocks that had patterns carved in. The block was dipped in ink and printed on the namda. Nowadays a tracing sheet is used which has designs drawn on them and small holes poked in for the ink to print on Namda.

Wool yarn
The ink used is usually washable ink which is easily available in the market. In older times a kind of white mud was used to trace the designs.

Wool yarn is preferred for the embroidery on namda. They are available in beautiful colours for xyz Rs per kg.

Aari
Aari is a hook-like needle which is used to do the chain stitch embroidery on Namda.

Doyimparath - second layer
After the first layer, the second layer of wool is spread evenly. The number of layers depends upon the customer demand or the market it is being prepared for. For local markets thin namdas are also made that have 2 layers but for international market where the quality is prime focus 3 layers of wool are spread.

AabDiyun - soap water sprinkling
After the second layer of wool is spread evenly the layer is sprinkled with hot soapy water which acts as a binding material. This is done with the help of a twig broom and a water container[Fig 18, 19]. The broom helps in the distribution of soapy water while the container is used to store the soapy water for sprinkling.

Dashi - wool Tassels
This is the most creative step in the process of felting but is done only for some Namdas. The step is followed for exotic tasseledNamdas that we see in the market. For tassels or Dashi raw wool pieces are taken and spread on the boundaries of namda. The tasseles are placed between two layers and the top layer is pressed firmly so as to ensure the binding of wool with Dashi.

Wattun - rolling
In this step the basic layer of mat is carefully rolled and gathered together. With the help of a rope this rolled Wool is secured. This step helps in proper rolling of wool which results in binding of wool fibers together.

Lath Diyon - rolling with feet
The karigars then roll the namda on the floor with the help of feet and hands for almost 45 minutes to 1 hour. The time of Lath diyun also depends on the size of Namda. The intense rolling puts pressure on the moist fibers of wool which results in close binding and interlocking of wool fires together. The soap water that is sprinkled between the layer also acts as binding material and the overall process forms a felted sheet of wool. The felted rug is taken out of basic sheet.

Mandun - milling
This is the last step in felting. This step the mat is pressed vigorously and is rolled back and forth with hands and forearms, the rug is pulled and pressed in desired shapes for almost 1 hour. The head artisans keep checking the dimensions of the rug so as to be sure of how long the madun is required. Between this step the rug is rubbed with soap so as to get better results as the soap acts as binding material and also softens the wool. The laborious step not only marks the end of felting but the hard work creates a masterpiece of its own kind. This step ensures that the fibers are interlocked more properly.

Chalun - washing of the final rug
After Mandun the rug is ready and is rolled back and tied with a rope. The rolled rug is then taken to a running tap of Karkhana (work station). And is left under the running tap. The flowing water gets rid of extra soap which is there in the Namda. Extra soap is harmful for the Namda

so the rug is washed thoroughly to get rid of soap water and also to prepare the namda for dying. After this the rug is dried.

Rangun - Dyeing

The beautiful colors we see in namda are the result of this step. The dyeing process is done in RangsazMuhalla of Down Town. The dyeing station has a color bath tub which is a massive structure and has a copper handi for holding water and namda. Five to six Namdas are dyed together at a time. Beneath the water bath there is a fire burning continuously to keep the water boiling. Along with colors diluted sulphuric acid is also added so as to retain the colour. For dyeing two to three people are required. The dyeing station has big ropes for drying. After this the Namda is sent for embroidery.

Embroidery

The final namda is embroidered with chain stitch also known as crewel. For the Embroidery part colorful yarn and a needle called Aari is used.

The embroidery part has 2 steps.
One where the pattern is traced on the rug. The raw Namda is of two shades white and off white. The white is a combination of wool and cotton where the addition of cotton gives a whiter shade to Namda, whereas the off white Namda has more wool or only wool and thus has off white shade. The Namdas are embroidered with beautiful bright colors.

The designs are drawn on a sheet of tracing paper and Tracing paper is used to trace the beautiful patterns on Namda. The patterns are usually flora and fauna found in the surroundings. The practice was earlier done with the help of wooden blocks that had patterns carved in. The block was dipped in a mixture of charcoal powder and kerosene oil or white mud. Nowadays a tracing sheet is used which has designs drawn on them and small holes poked in for the ink to print on Namda.

The second step of embroidery is the basic outline called Tahrir. The stitches of Tahrir are longer than the filling one, however if we see the old namdas, even the outlines are very intricate. After the outline filling is done with contrast colors or the same shades. The Namda is adorned with beautiful borders where the edges are covered with a blanket stitch of contrast colors.

Namda design names and patterns commonly used are-

- Pamposh-(lotus)
- Chinar-(maple)
- Paisley
- Satburg (7 petaled)
- Rent maal (loop chain)
- Ghas (3 leafed grass)
- Naal (outline of flowers)
- Kuldaar (tree of life)
- Czuberg (4 petaled)
- Jangildaar (forest)
- Gurundaar
- Gaad (fish)
- Poshka
- Pambachdaar (lotus fruit)

- Janawar (birds)
- Dachewatir (grapevine)

Final Product

Final Products are Rugs of different sizes and shapes. The namda is preferred plain by some people i.e. without embroidery while most of the people prefer embroidered. The Plain Namda is also used under mats or other coverings. The new age artisans have started making small felted pieces which are used as table top covers or adorning small spaces. Namda has now become a product to showcase luxury and tradition. Rug is used as bed covers, handbags, mattresses, wall hanging, but mostly it is used in the form of traditional matting. Namda are extensively used in Kashmiri households as an effective and inexpensive floor covering and mattress. In Srinagar, cotton is also mixed with the woolen fibers to create a fabric that is usually white in color and may be easily embroidered with ari in floral patterns or in compositions containing stylized animal figures. Namda are being produced in large numbers in the valley for sale in international and national urban markets, and thus significantly contributing to the kashida embroidery industry.

Namda are very warm, if used, as bed-mattresses, and also make excellent- coverings, which have steadily held their own even in these machine-ridden times. Namdas make excellent floor-clothes not only in houses and house - boats in Kashmir, but anywhere.

Techniques

Due to the high demand in Namda many new design interventions have been done over the years. There are 3 types of namda available now. One is the basic namda for which the technique of rolling is used and then it is embroidered with beautiful designs and is left as it is. The second is patterned Namda in which patterns are created during felting. In this small patches of pattern are cut from soft felt and arranged as per the design along with a layer of wool then with the help of rolling and felting the namda created has a self design with beautiful colors.

A new rolling machine was invented by the efforts of IIT Roorkee and local Artisans. The machine made the process of rolling much easier and convenient and women could also participate in this step of processing.

Quality check

The quality check of namda is very strict, no type of impurities is accepted in the rug and even the quality of wool and wool cotton ratio is inspected before exporting. The wool cotton ratio is determined by the color of the rug, as the usage of cotton enhances the white color which reflects while dyeing also.

Design evolution- Patterned Namda

The patterned namda is the new design addition in Namda. In this felt strips are arranged in different design patterns which form the first layer and after this the layer of wool is spread which forms the back layer. After this the same process of rolling and milling is followed. The designs of Patterned namda are mostly geometric.

The patterned namda is new product development in Namda craft. The product is made by creating a thin felt sheet from which strips of shapes are cut and used for making unique geometric patterns. The strips are usually thin so that it mixes up with the wool layers during felting. The process includes making a grid which is sprinkled with water and filled with colorful wool fibers according to design. The grid created at the base includes borders and other details

that have to be done at base stage only. After laying out the pattern and filling the colors, layers of wool are sprinkled like the basic Namda. After this the rug is rolled and steps of felting are followed. The designs are usually geometric and like that of Islamic art tessellations, which is also found in the famous wood art Khatamband of Kashmir.

Namda Quality Control Board

THE JAMMU AND KASHMIR NAMDHA QUALITY CONTROL ACT, 2010 (1953 A.D.)

The act was established to keep a quality check on Namdas being exported. DN Saraf in his book 'Arts and Crafts, Jammu and Kashmir', mentions the setback in trade of Namda between 1947 and 1953 due to the unhealthy competition among producers, which led to deterioration of quality. As then Director of Industries in the state, DN Saraf was responsible for formulating a proposal for introduction of Numdah Quality Control. Previously there were five grades fixed for Namdas. Currently there are only three grades Under the act, Namdas have to be made of clean, well- carded, undyed wool and cotton, free from dust, other fibers and foreign matter.

The wool and cotton have to be evenly spread and to ensure reasonably uniform thickness and stiffness

In numdah made of wool and cotton. Outer layers have to be of wool and the middle layer of cotton

Each outer layer must have an equal content of wool.

For embroidery the woolen yarn has to be dyed with acid color of good fastness to light and hand washing.27

The quality control Board for Namda still keeps a check on exported rugs. The Lot of rugs to be exported is randomly checked by taking a patch from any rug and testing the ratio of wool and cotton, so as to ensure that only good quality rugs are exported.

Designs & Description of Quality

The designs of namda depend on the shape and size, each piece is adorned with a different embroidery pattern. The contrasting colors of embroidery threads with dyed namdas create pieces that are one of a kind and loved by local as well as international customers. The addition of Dashe (tassels) is done for ordered namdas which is hard to attain in machine felted rugs28. Namdas, being always in demand has seen a lot of design intervention which resulted in new color combinations that are minimalistic and also new motifs for embroidery.

Many artisans love to experiment for international customers and deliver different products that are experimental in terms of size, shape, color and embroidery. The new patterned namda is also adorned with beautiful geometric patterns and color combinations.

The quality of Namda depends on the quality of wool and the ratio of wool and cotton used and also on the techniques of felting the artisans follow. The machine felted namdas don't have many size options but the hand felted rug has different sizes available along with the technique of adding wool tassels. The life of a Namda is 10 to 12 years.

The best known rugs of India are Namdas, also called chain stitch rugs. Most of the designs feature florals, and many the delicate beauty of the chinar leaf. The felted rug is covered completely with chain stitch so that the background does not show.

Prices of Namdas depend upon the Quality of wool and pattern (plain or embroidery), size of the product and the neatness in designs. Prices vary with the percentage of wool- a Namda

containing 80% wool being more expensive than one containing 20% wool. The fineness of embroidery or the intricacy also plays an important role in the pricing of Namda. Along with the wool cotton ratio and embroidery the size of rug also is taken into consideration while pricing.

J) Uniqueness:

The uniqueness of Kashmiri Namda lies in its distinctive production process, materials, and artistic craftsmanship. This traditional handmade product is much more than just a floor covering; it embodies the cultural heritage and artistic excellence of Kashmir. Here are the key aspects that make Kashmir Namda unique:

Craftsmanship and Materials
Felting Process: The base of a Namda is made through the felting process, where wool (often a blend of wool and cotton) is spread evenly on a mat, rolled, and then compressed underfoot to bind the fibers together. This results in a thick, durable fabric that can be used as a floor covering, mattress, or wall hanging.
Use of Local Wool: The wool used is typically sourced from local sheep, making it a sustainable and regionally authentic product. The natural properties of wool, such as insulation and softness, make Namda highly functional, especially in colder regions like Kashmir. In order to issue GI label to the a Namda, only those namdas will qualify whose wool percentage will be 95% or higher. Embroidery: Once the felted wool is prepared, Kashmiri artisans embellish it with intricate chain stitch embroidery. The embroidery is done using an Aari needle (a traditional tambour needle), which allows for fine, detailed designs. The yarn used for embroidery is often made from wool, giving it a textured finish that enhances both durability and aesthetic appeal.

Designs and Motifs
Floral and Geometric Patterns: Traditional Namdahs often feature intricate floral designs like the Chinar leaf, local flowers, or geometric patterns. These motifs are closely linked to Kashmiri culture and nature, reflecting the region's rich botanical diversity.

Animal and Bird Motifs: Over time, Kashmiri Namdas have also embraced newer designs, including animal and bird motifs like the Kingfisher. These motifs add a modern twist while maintaining the connection to nature.

Handcrafted Details: The embroidery is painstakingly done by hand, making each piece unique. The use of the chain stitch technique creates a distinct texture, with the wool threads standing out against the felted base, adding depth and richness to the design.

Functional and Aesthetic Appeal
Insulating and Durable: The thick felted wool construction provides excellent insulation, making Namdas ideal for colder climates. They are used not only as decorative pieces but also as practical floor coverings and mattresses, offering warmth and comfort.

Versatility: While primarily used as floor coverings, Namdas can also be utilized as wall hangings, adding a touch of Kashmiri artistry to interiors. The vibrant embroidery can transform a simple wool mat into a statement piece for home décor.

Traditional and Modern Appeal: Kashmiri Namdas combine traditional techniques with modern sensibilities. The traditional floral patterns and motifs continue to be popular, but there is also a growing market for updated designs with more contemporary motifs and color palettes.

Cultural and Historical Significance
Symbol of Kashmiri Heritage: Namda making is a deeply ingrained craft in the Kashmir Valley, particularly in downtown Srinagar in areas like Sher-e-Khas. The process of making Namdas is closely tied to Kashmiri cultural identity, passed down through generations of artisans.

Local Community Craft: The craft of Namda making is community-based, with artisans often working in close-knit groups or families. The entire process, from felting to embroidery, is carried out locally, ensuring that the craft remains an integral part of the region's economy and culture.

Handmade and Authentic: The fact that each Namda is handmade adds to its uniqueness. No two Namdas are exactly alike, making each piece a one-of-a-kind creation. The attention to detail and the time spent on each piece ensure a high level of craftsmanship.

5. Economic and Cultural Role
Export Potential: Over the years, Namdas have found their place in international markets, especially in countries like France, Germany, the U.K., and the U.S. The unique combination of artistic embroidery, quality wool, and practicality has made Namdas a sought-after handicraft in global markets.

Sustainable Craft: Namda production is an eco-friendly craft. It uses natural materials like wool and cotton, and the felting process requires minimal mechanical intervention, making it a sustainable alternative to mass-produced carpets and rugs.

6. Variety of Shapes and Sizes
Kashmiri Namdas are made in various shapes, including rectangular, oval, and circular. The size of a Namda can range from small decorative pieces to larger floor coverings, offering flexibility for different spaces and uses. The variation in shapes adds to the charm and adaptability of the product.

The uniqueness of Kashmiri Namda lies in its intricate craftsmanship, cultural significance, and the combination of functional utility with artistic beauty. The use of local wool, traditional felting techniques, and hand-embroidered designs makes it a distinctive product that reflects the rich heritage of Kashmir while remaining relevant in modern interiors across the world.

K) Inspection Body:

The proposed structure/ method of inspection and implementation of the GI

- One Representative from Handicraft and Handloom Department,Kashmir
- One Representative from regional office of Development Commissioner Handicrafts, Ministry of Textile, Government of India.
- One Representative from Indian Institute of Carpet Technology (IICT)
- One Representative from Craft development Institute, Srinagar
- One representative from"**The Wirasat Handicrafts Industrial Cooperative Ltd".** A Crewel and Chain-stitch Manufactures Exporters Association.

L) Others:

The history of Namdah exports from Jammu and Kashmir has seen fluctuations in demand and evolving market preferences, as highlighted by Dr. Santosh Gupta in his book Jammu Kashmir Handicrafts and Global Market. According to Gupta, from the 1970s to the 1980s, Namdahs were exported to several key international markets, including France, West Germany, the U.K., the U.S.A., Japan, and Australia. These markets played a significant role in establishing the global presence of Kashmiri Namdahs.

Key Export Markets

United Kingdom: In the U.K., Namdahs were primarily of smaller sizes, with 6ft x 4ft being the most common. This suggests that these Namdahs were mainly used for decorative purposes rather than for covering floor spaces. The demand fluctuated due to changing consumer tastes, with the traditional floral patterns becoming less appealing over time. Although Namdahs found a niche market, competition with other rugs from various countries made it harder to maintain consistent demand.

Belgium: Belgian consumers preferred high-quality Namdahs, specifically those with wool embroidery. While mixtures of wool and cotton were accepted for the felt, the quality of dyeing and color choices were areas that could be improved. The market here valued the craftsmanship, but more attention to color and dye quality was suggested for future success.

Netherlands: In the Netherlands, color was a crucial factor in consumer choice. While consumers would sometimes accept lower-quality Namdahs if the color matched their preferences, bright colors such as red were avoided. More sober, harmonious colors like pale blue, copper, and grey were preferred. The demand in the Netherlands was focused on smaller sizes, with 70 cm x 140 cm and 70 cm x 100 cm being the most common dimensions.

Market Trends and Fluctuations

The demand for Namdahs in these markets showed cyclical variations. For several years, Namdahs would sell well, only for demand to decline due to shifts in fashion and consumer preferences. This inconsistency in demand was more linked to changing tastes rather than a lack of marketing efforts or design alterations.

France: France, particularly, was a market where Kashmiri Namdahs found some degree of sustained interest. While demand fluctuated, there was a consistent market for the product, especially for those with geometric and floral designs. However, consumers in France were increasingly focused on the quality of the product. Higher-quality Namdahs, even at a higher price point, could still generate demand in this market if their quality was up to standard.

Germany: The demand for Namdahs in Germany was steady but did not show significant growth. German consumers appreciated the quality of the Namdahs, especially those with geometric and floral patterns. However, scenic designs did not appeal much to the German market.

Challenges and Opportunities

While Namdahs were gaining recognition in global markets, there were several challenges to their continued success:

Changing Consumer Preferences: The primary challenge was the evolving taste of consumers, especially in Western Europe, where traditional floral patterns became outdated. To sustain interest, manufacturers would need to continuously innovate with new designs and colors.

Quality and Dyeing: The demand for Namdahs was influenced by the quality of materials used and the dyeing process. Countries like Belgium and the Netherlands emphasized the importance of quality embroidery and well-dyed wool.

Design Variations: The introduction of new designs and color schemes could significantly boost the appeal of Namdahs. Bright, bold colors like red were less favored, while neutral tones and balanced color schemes were more in demand.

Market Positioning: With proper marketing efforts, Kashmiri Namdahs could be introduced into the higher-income segment through interior design shops. However, this required a constant refresh of designs and colors to maintain relevance in competitive global markets.

Overall, while Kashmiri Namdahs established a place in the global market their demand was subject to cyclical fluctuations. The markets of Western Europe, including the U.K., Belgium, and France, offered both opportunities and challenges. With an emphasis on quality, design innovation, and careful attention to market preferences, Namdahs could continue to hold appeal. Despite declining demand in some regions, maintaining product quality and regularly updating designs could help Namdahs regain popularity and open doors to new markets.

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G.I. APPLICATION NUMBER – 869

Application Date: 13-04-2022

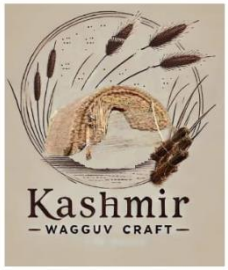
Application is made by The Wirasat Handicrafts Industrial Cooperative Limited at Kashmir Haat (Exhibition Ground), Srinagar, Kashmir – 190 009, Jammu and Kashmir, Indiafor Registration in Part - A of the Register of **Kashmir Wagguv** under Application No. 869 in respect of Handicraft – Wagguv falling in Class – 27 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The Wirasat Handicrafts Industrial Cooperative Limited

B) Address : The Wirasat Handicrafts Industrial Cooperative Limited, Kashmir Haat (Exhibition Ground), Srinagar, Kashmir – 190 009, Jammu and Kashmir, India

C) Name of the Geographical Indication :

Kashmir Wagguv



D) Types of Goods : **Class 27**– Handicraft - Wagguv

E) Specification:

The Kashmiri Wagguv is a traditional, organic handmade mat crafted from the grass reed known as Peich, which belongs to the Typha species (specifically Typha angustifolia). These mats are produced locally in Kashmir, particularly in areas surrounding Dal Lake, such as Akhoon Muhalla, Moti Muhalla, and Malura. Historically, the Wagguv was an essential household item, found in nearly every home and houseboat in Srinagar due to its insulating properties. It was particularly valued for its ability to provide warmth and comfort in the cold, damp climate of Kashmir.

The production of Wagguv mats is a skill passed down through generations, with the art of weaving the reeds woven into the cultural fabric of local communities. Today, the mats are still used by people living in the vicinity of Dal Lake, including the residents of houseboats and those in nearby villages. While some urban residents continue to purchase these mats as artisanal artifacts, the craft has declined over time, with fewer people engaging in its production. As a result, Wagguv weaving is becoming a dying craft, with little national or international recognition.

The plant used to make these mats, Peich (Typha angustifolia), thrives in the marshy lands of Kashmir's lakes, especially Dal Lake and Anchar Lake. These wetlands provide an ideal environment for the plant, which requires shallow water depths (11-25 cm) to grow, and it is sensitive to salinity. The wetland systems, including rivers, ponds, and marshes, create a suitable habitat for this species, contributing to the unique production of these mats. The reed is harvested from these areas and then woven into the mats that are highly valued for their practical uses, as well as their aesthetic and cultural significance.

Despite the growing demand for handmade, sustainable products, the craft of making Wagguv mats remains largely underappreciated outside the local communities, making it a precious yet endangered art form.

F) Description:

The tradition of making Wagguv, a type of floor covering, is a distinctive craft from Kashmir that showcases the region's rich cultural heritage and the use of natural, sustainable materials. Passed down through generations, this craft involves the weaving of grass mats, traditionally made from the reed Typha angustifolia, which is found only in the Kashmir region. This material is prized for its insulating properties and biodegradability, making it a sustainable and eco-friendly choice for floor coverings.

The production process of Wagguv is a meticulous, home-based activity, requiring skill and knowledge passed down through families. The process typically involves two people, and it can take up to four days to weave a 4x10 ft mat. The mats are made using simple techniques such as Walkhur (single weave) and Seod (double basket weave), which are designed from memory and without detailed drawings. These mats are woven from Peich, a reed that grows in the marshy areas of Kashmir, especially around Dal Lake. The mats are appreciated for their natural, golden yellow color, which results from the drying process, and no synthetic dyes are used.

The insulating properties of Wagguv are one of its key features, making it highly valued in Kashmir's extreme climate. In winter, it helps retain heat, while in summer, it provides cooling effects. Additionally, Wagguv has health benefits, including improving blood circulation, promoting relaxation, and alleviating back pain due to its firm and supportive nature.

Wagguv mats are used in various settings, from homes and shikaras (houseboats) to temples, mosques, and Sufi shrines. They have been a staple in Kashmiri households, especially in rural areas, and were commonly used as floor coverings or as insulation under other mats. Over time, urban areas also adopted the use of Wagguv, recognizing its practical and aesthetic qualities.

The raw materials used in the production of Wagguv are sustainably sourced. For example, the reed can also be used as feed for cattle, for thatching roofs, and as binding material in mud plastering walls. Even the leftover grass is not wasted; it is used as fuel for cooking or as fertilizer for kitchen gardens. The product's life cycle—from raw material collection to disposal—shows its eco-friendly nature and alignment with the principles of sustainability.

Wagguv is not just a functional item but an example of cultural and environmental sustainability, intertwining the craftsmanship of skilled artisans with the preservation of the environment and

the careful use of natural resources. Its continued use in Kashmir highlights its importance in both traditional lifestyles and as a symbol of the region's cultural identity.

The Wagguv mats, woven from Typha angustifolia reed, are not only a significant part of Kashmir's cultural heritage but also a sustainable and health-beneficial product. Here are some key aspects of Wagguv mats:

Health Benefits:
Improves Blood Circulation and Promotes Relaxation: Wagguv's natural material is said to increase blood flow, help release muscle tension, and promote overall relaxation.

Back and Disc Relief: Sleeping on a Wagguv mat, due to its firm yet comfortable surface, helps in maintaining a straight posture, alleviating back pain, and curing disc problems. The lack of additional padding between the body and floor allows the spine to remain aligned.

Durable and Comfortable: These mats are both durable and soft underfoot, offering a rich texture and a natural tonal variation. Their durability and texture indirectly contribute to better blood circulation when used regularly.

Thermal Insulation: Wagguv mats have natural insulating properties, providing warmth in winter and cooling in summer, making them highly suited to Kashmir's extreme climate.

Production Process:
The grass used to make Wagguv mats is known as Peich, which is cut, dried, and woven by local artisans, mainly women, in Kashmir. These mats are a result of generations of craftsmanship, passed down through families and learned through oral traditions and demonstrations.

Weaving Techniques: The mats are crafted using two primary weaving styles:
Walkhur (Plain Weave): A single weave design.
Seod (Basket Weave): A double weave design.
The weaving process is done entirely by hand, with each mat taking several days to complete, showcasing the meticulous skill and patience involved.

Sustainability:
Biodegradable: Wagguv mats are made from organic and biodegradable materials, meaning they don't contribute to environmental pollution.

Resource Utilization: The reeds are not only used to make mats but also for other purposes such as feeding cattle, creating ropes for vegetable markets, and even as binding material in mud plastering for walls (Kalroon).

Reusability: Over time, Wagguv mats wear out. The leftover material is not discarded but is repurposed—either as a base for new mats, fuel for cooking, or even fertilizer for gardens. This circular use of materials underscores Wagguv's sustainability.

Scientific Backing for Insulation:
An article in the International Journal of Polymer Analysis & Characterization supports the thermal insulating properties of Typha angustifolia by showing that composites made from this reed have low density and better thermal insulation compared to polyester. The reed also

possesses excellent mechanical properties, making it an effective insulator in various applications, from construction to automotive parts.

Cultural and Functional Usage:
Versatility: Wagguv mats have been widely used in both rural and urban households, with different raw materials depending on access to local resources. In rural areas, straw mats (Patej) were common, while in urban areas, Peich was preferred.

Use in Religious and Cultural Sites: Initially, Wagguv mats were introduced in religious sites like mosques, temples, Sufi shrines, and Khanqahs. Over time, they became an integral part of the daily life in Kashmiri homes and shikaras (houseboats).

Decorative Functionality: In addition to their functional uses, Wagguv mats were also creatively designed for aesthetic purposes, such as for window panes and even shaped to fit the frustum base of shikaras. Artisans have experimented with various shapes and sizes, though no synthetic colors are added, preserving their natural appeal.

Wagguv is a perfect example of a sustainable product that provides not only social and environmental benefits but also health advantages. The organic nature of the raw material, combined with its insulating properties, durability, and recyclability, makes it an excellent product for both traditional and modern applications. The continued practice of weaving Wagguv mats supports not only the local economy but also helps preserve a vital part of Kashmir's cultural heritage.

G) Geographical area of Production and Map as shown in page no:

The famous Dal lake is the main centre for this craft as the raw material grows naturally in the marshy area of Dal. The lake is located on the eastern part of Srinagar city in the state of Jammu and Kashmir, on the right bank of River Jhelum. The lake has a surface area of 18-22sq km and has about 315 hectares of marshy land 12.8 percent of the total area. meters above sea level, covering an area of about 11.5 Kilometres. Dal Lake, the main receiving water body of the watershed, is situated between 34°5'-34°6' N latitude and 74°8'-74°9' E longitude at an at an altitude of about 1,584. The producers are mainly the local dwellers around these swampy areas of ChakBagh, Aakhoon Mohalla, Dal Lake and Aanchar. These areas are mainly surrounding the famous Dal Lake. The weavers are mainly from these areas due to the availability of Raw material and skill set they have mastered to weave the mat.14The weaving skill and techniques have been inherited by the new generation fromthe old generation. The dwellers of Dal usually used mats to cover shikara roofs and house boat floors. The main reason for the dwellers being masters of these crafts is that the Lake forms the perfect habitat for the plant to grow. The ideal water depth required is 11-25 mm, and the species does not survive in water deeper than 60-80 cm. The plant is not very tolerant of salinity also. The Plant is abundantly found in Marshy areas of Kashmir i.e; the famous Dal Lake and some parts of Anchar Lake. The Lakes provide the perfect breeding ground for the plant to grow. The Dal Lake has a depth of 6 metres (20 ft) at its deepest in Nigeenlake to 2.5 metres (8.2 ft), the shallowest at Gagribal. The depth ratio between the maximum and minimum depths varies with the season between 0.29 and 0.25.

Producers/Clusters
The Geographical Location for Wagguv Production is District Srinagar. The producers are mainly the local dwellers around the swampy areas of ChakBagh, AakhoonMohalla, Dal Lake, and Aanchar. The weavers near Dal usually belong to the Hanji community, but other

communities also have mastered the art. The weavers are mainly from these areas due to the availability of raw material and skill set they have mastered to weave the mat. The weaving skill and techniques have been inherited by the new generation from the old generation. The dwellers of Dal usually used mats to cover shikara roofs and house boat floors.
Anchar is a semiurban, single basin lake situated between 34°07'-34°10' N latitudes and 74°46'-74°48' E longitudes at an altitude of 1,583 m above mean sea level (a.m.s.l.). The lake is situated about 14 km from Srinagar city in the north-western part. The lake covered an area of 19.54 km2 during 1893– 1894.

The mat is also woven in the Malura-Khwajabagh area where the grass reed is outsourced from swampy areas of Dal. The Wagguv weavers of Khuwajabagh are basically the dwellers of Marshy Lands of Dal who shifted to Khwajabagh. Despite shifting the weavers kept the art of Wagguv weaving alive. Mat making is also prominent in rural areas of Kashmir but the grass here used is different, it is not sourced from marshy lands but from the Paddy lands.

Local artisan Zameer Hussain Bhat and his Mother Malla begum, formed the latest cluster for this Dying craft, Under the Karkhandar scheme with the support of Handicrafts Department Kashmir. The cluster is situated at Malik Mohalla- Dal Lake. This Skill Up gradation centre facilitates the learning and earning of few left artisans associated with this craft. Dal is an urban lake, situated between 34°5'-34°6' N latitude and 74°8'-74°9' E longitude at an at an altitude of about 1,584 meters above sealevel, covering an area of about 11.5 Kilometers. The lake is divided by 4 basins from north to south: Hazratbal, Boddal, the Nigeen and Gagribal. Gagribal is the shallowest with maximum depth of only 2.5meters.

Wagguv weavers can be found in the following areas

- AkhoonMohalla near Hazaratbal
- Sultan Mohalla of SaidaKadal locality
- KachurMohalla and its adjacent areas, situated in the interior of theDal Lake
- MotiMohalla in the interior of the Dal Lake
- Maloora, khwajabhag
- MalakMuhalla, Dal lake

The above mentioned areas have marshy lands nearby which makes the availability of Reed easy. People living near the marshy lands of Dal are the ones who mainly indulged in this craft, the reason being the availability of raw material and also the knowledge of material handling. The dwellers of Dal Lake or near mastered the art of weaving. Even the houseboats and shikaras had Wagguv as matting, roofs and curtains.

Number of Producers
Wagguv is an ancient craft of Kashmiri and dates back to the 18th century. The 300 year old craft is a legacy carried forward by generations altogether. There was a time when it was in such a boom that over 500 families only in the Srinagar area of the Valley were engaged in this art. Out of these 500, 51 families lived in AkhoonMohalla alone. The art was considered to be sacred to such an extent that it was mandatory for the new generation to learn the craft and anyone not inheriting the weaving skill for mat making was looked down upon. Today there are only few families across the entire Valley of Kashmir who know the craft of Wagguv Weaving. The MotiMuhalla situated in the heart of Dal lake used to be a budding place for Wagguv Weavers which barely has any practising artisan left as they have shifted to other jobs.

It typically takes 4 days to weave one Wagguv mat of 4x10 ft. The mat weaving is done along with household works and requires two people to weave. But a single person can also weave an entire mat by himself which will require more time.

H) Proof of Origin (Historical records):

REFERENCE

Historical Origin

The grass mat was the basic matting used in kashmiri households however the type of raw material used differed in urban and rural areas. The rural matting in Kashmir consisted of the mats prepared of the straw, called Patej, while the urban people having no access to the paddy straw preferred Peichto make Wagguv, which grows in the wetlands in the outskirts of the city. Gradually the Wagguv became a part of rural Kashmir. Initially Wagguv matting was introduced in village mosques, Temples, Khanqahas and Sufi shrines. Wagguv matting was most common and every Kashmiri household could afford it easily.

Wagguv weaving was not only confined to mat making but the weaving technique was also used to make traditional shoes called Poulhord in local language. These shoes used to provide warmth in harsh winters and Cooling effect in summer. Wagguv has been a part of kashmiri history since ancient times .The specimens of these are available at SPS museum which dates back to the 19th century. The Wagguv weave was not only confined to mats but was also used as curtains and shikara roofing and matting. The ideal Wagguv size is 4/10, 4/8, 2/6. Other sizes are also available, but bigger ones makes it difficult to work with and also makes it lose its charm.

Poet Zareef Ahmad Zareef says that in olden times every kashmiri household had an array of wagguv as everything from flooring to curtains were made of wagguv. Even the shikara we see today had miniature wagguvs weaved according to the angular shape of shikara for baithak and gadi, even the roof of shikara was that of Wagguv.

The art of Wagguv making is dying but still holds an important place in many households who either buy it as an artifact or are still indulged in the craft. It takes typically 4 days to weave a 10 ftWagguv while the artisans continue with their regular household work. The art of mat making is not only confined to women but men also create marvellous pieces of weave. Wagguv was not only organic but was recycled also as the leftover grass was used in traditional mud cooking stoves as fuel.

Remains of reed mats along with those of pottery have been excavated at Burzahom (Kashmir) DN. Saraf-1987

‘Akhwananwagivibiyakhpilnawanchus pets’

One weaves the mat, another holds out to him the reed. Meaning- The mat makers could work much better alone- hence it is quoted when unnecessary help is received

Kashmir proverb- from A Dictionary of Kashmiri Proverbs & Sayings: Explained and Illustrated from the Rich and Interesting Folklore of the Valley [James Hinton Knowles 1885]

Documentation- Image archive

- *A family indulging in Wagguv weaving. Image taken in 1965*

- *Wagguv ceiling can be spotted on the boat in the background.*
- *A family in their house boat. Here the ceiling and curtains are wagguv.*
- *Shikaras with Wagguv ceiling.*
- *Kashmiri woman weaving a Wagguv mat.*
- *A British fashion photographer Norman Parkinson did a shoot for Vogue in the year 1965 in India, in which few were shot in the dal. Wagguv can be spotted in both the images. The goat is standing on a Wagguv mat in the first one while the model is sitting on a mat in the second image.*
- *Picture of Wagguv as Dunga entrance, plate I- My DungaEntrance , 1920- Cashmere, Three Weeks in a Houseboat-A Petrocokino*
- *Picture of Wagguv as boat roofs , plate VII- HazratbalGhat during the Fete, 1920- Cashmere, Three Weeks in a Houseboat-A Petrocokino*
- *Picture of Wagguv as boat roof , plate VIII- Hazratbal Arriving for the fete, 1920- Cashmere, Three Weeks in a Houseboat-A Petrocokino*
- *Picture of Wagguv as boat roofs , plate XVII- Bejbehara Rice mill, 1920- Cashmere, Three Weeks in a Houseboat-A Petrocokino*
- *Picture of Wagguv on houseboat , plate XXI -My boatman's youngest, 1920- Cashmere, Three Weeks in a Houseboat-A Petrocokino*
- *Picture of Wagguv as Roof pg 39, 1915 The vale of Kashmir - Denys, F. Ward (Frederick Ward)*
- *Picture of Wagguv as matting pg 48- A domestic Rice Mill , 1915 The vale of Kashmir - Denys, F. Ward (Frederick Ward)*
- *Picture of wagguv mat -1895 - Walter R. Lawrence -From the Book The Valley Of Kashmir*
- *Photojournalist James Burke did a photo series titled kashmir vacation for life magazine in the year 1964. The image is of a florist showcasing his exotic flowers to a foreigner. A wagguv mat can be spotted on his boat.*
- *The movie Kashmir kiKali(1964) starring ShammiKapoor and Sharmila Tagore was set in Srinagar. In a scene where Sharmila Tagore is conversing with Pran, Wagguv artisans can be seen in the background.*
- *1910 Little girl pounding rice, Gulmarg, with Wagguv as curtain.*
- *Photograph of tinsel workers in Jammu & Kashmir in India, taken by an unknown photographer in the 1890s.*
- *Photograph Taken in 1900 by James Ricalton -Captioned as Humble shawl weavers, a father and son working together.*
- *Picture of Wagguv as as roof- A welcome to Maharaja pg 122, 1915 The vale of Kashmir - Denys, F. Ward (Frederick Ward)*
- *Wagguv as matting while making NamdaPg 212- A Namda Designer- Arts and Crafts, Jammu and Kashmir: Land, People, Culture- D.N. Saraf 1987.*

Documentation- Historical references in books

The grass mat was the basic matting used in kashmiri households however the type of raw material used differed in urban and rural areas. The rural matting in Kashmir consisted of the mats prepared of the straw, called Patej, while the urban people having no access to the paddy straw preferred Peich to make Wagguv, which grows in the wetlands in the outskirts of the city. Gradually the Wagguv became a part of rural Kashmir. Initially Wagguv matting was introduced in village mosques, Temples, Khanqahas and Sufi shrines. Wagguv matting was most common and every Kashmiri household could afford it easily.

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Remains of reed mats along with those of pottery have been excavated at Burzahom (Kashmir) **Saraf, D.N, Arts and crafts, Jammu and Kashmir: land, people, culture, Abhinav Publications, New Delhi, 1987**

'Akhwananwagivibiyakhpilnawanchus pets' One weaves the mat, another holds out to him the reed. Meaning- The mat makers could work much better alone- hence it is quoted when unnecessary help is received Kashmir proverb- from A Dictionary of Kashmiri Proverbs & Sayings: Explained and Illustrated from the Rich and Interesting **Folklore of the Valley [James Hinton Knowles 1885]**

Matting is said to have been introduced by MirzaHaiderDughlat. **Ta'rik-i- Hassan 1954, MD Sufi 1996**

Lawrence says that the excellent matting (wagguv) of Kashmir is made from the piech, a swamp plant, found mostly in the Anchar Lagoon to the north of Srinagar. And in most of the swamps of Kashmir. All boats except of course, the house-boat are roofed with Peich matting. Mats are mostly employed as coverings for floors and numerous other purposes. The industry of mat-making gives employment to a large number of people .The villagers of Lasjin, to the south of Srinagar, are perhaps the best mat makers in the valley. **MD Sufi 'Kashir-Being History of Kashmir'Chapter- Arts and crafts under muslim rule Pg-589**

Walter R. Lawrence in his book 'The valley of Kashmir' explains about the flora of Kashmir and its mountains and how they possess some well knowneconomical value for the people. Lawrence also tells about how Kashmiri put every plant and tree to use. Praising how kashmir has natural fibre producing plants which are used to make ropes Lawrence explains about Piyaze. Piyaze is the swamp plant from which excellent matting (wagguv) of Kashmir is made. theAnchar lagoon to the north of Srinagar, is the great home of piyaze, though it is found in most of the swamps of Kashmir. All boats are roofed with Piech matting and the mats are employed as coverings for floor and in numerous other ways. **Walter R Lawrence-1985 The valley of Kashmir**

Walter Lawrence explains how the industry of mat making gives employment to a large number of the people. And the Villagers of Lasjan to the south of Srinagar are perhaps the best mat-makers in the valley.Thewagoo is woven to form a thick pliable mat by interlacing Piech (reed mace) in the weft, with patij, made with grass from paddy residue by winding one end around the toe and twisting it to create a rope used as the warp. In a likely manner, the rural artisans expanded their market of Wagguv to urban territories. Each Kashmiri family could bear the cost of such mats effectively resulting in a great demand and giving employment to numerous artisans**. Pande, P. (2019, May). An Exploration of Kashmiri 'Naqash'Communities, their Craft Practices and Cultural Heritag**

The coarse spongy reed mat is an ancient Craft and a peculiarity of Kashmir. Remains of reed mats along with those of pottery have been excavated at Burzahom (Kashmir).Wagon is made from Peich that is grown in marshy places. Though the use of this excellent floor mat material is declining one can still see it is used in many homes as well as on the tops of Shikaras. With

some attention given to the quality of material and its weaving. **Wagguv- Arts and Crafts of J&K -by DN Saraf, Pg168**

Wagguv was not only confined to house matting. Those who live in houseboats have traditionally both made and used mats. Wagguv mats were placed under the bedding and carpets, to provide additional warmth. The poor all over Kashmir use these tough mats, Known as Wagguv. They are made from Peich (reed mace), a plant grown in swamps. Some such mat -making goes on in the Dal Lake itself, in the inner 'lanes' behind the tourist houseboats. KalpanaManglik, an expert, rates the mats of Lasjan, which is south Kashmir, as the best in Kashmir. **2004, Jammu Kashmir and Ladakh - Kashmir- by ParwezDewan, Pg- 293**

ParvezDewan mentions the use of mats traditionally in houseboats. The mats were used under the bedding & carpets to provide warmth. The mats made up of reed known as Peich were woven into tough mats used by the poor all over Kashmir. Some such mat making goes on in Dal Lake itself, in the inner lanes behind the Houseboats. Author also mentions the rating by KalpnanaManglik for the mats made in Lasjan (South Srinagar) being the best in Kashmir. **2011 The people & Culture of J&K -by ParvezDewan, IAS, Pg 227**

Iqbal Ahmad in his book Explains about the past domestic artifacts of Kashmir and mentions Wagguv as one of those. The art of Wagguv making was done in cool winters. Wagguv was manufactured by local weavers with locally obtained material. In older times Kashmir house holders decorated the floor with either leaves or mud plaster, which is evident from the excavations undertaken way back at Burzahom&Gufkral sites. Later the floors were decorated by open straw of rice grass. The floor after being level with mud plaster followed by dry grass and hay. Eventually use of grass mats came into existence which were prepared locally. Mats were made up of Peich or straw grass. Where the former was used in urban households and other in rural households. As floorings in Houses and places of worship Iqbal Ahmad in his book quoting Lawrence refers to Peich as the swampy plant used to make excellent matting, also the Anchaar Lagoon as the great home of Peich. The art of mat making was introduced in Kashmir in the period of MirzaHaiderDaughlat which dates back to 15th century AD. **Masterpieces of Kashmir- by Iqbalahmad, Pg-74, 75**

I) Method of Production:

Waguv is a soft spongy mat made with the basic basket weave. The mat can last upto 6 years and has health benefits. The artisans make two types of Waguv, Wathrun and Bazari which differ in thickness. The former is fluffier as it is weaved intricately. Locals ride in Shikaras to reach the wetlands where they gather the reed .Weavers in the Dal locality laboriously gather their raw material from the marshy areas and the reed is then taken to homes to prepare it for weaving.

After the men have collected the reed locally known as Peich the women of the house weave them into beautiful mats. Traditionally, it was the women who would actually plaid reed into a Waguv. The mat would sell in the markets at good prices and helped the weavers to earn enough money to sustain. The women essentially dry the grass and tie the reed with small wooden poles parallel. They then entwine dried rice straw into the reed verticals and tighten them. After the laborious process of plaiding, tightening and cutting and creating desired shapes, the Waguv is finally ready to be sold in markets. The craft involves the entire family where the roles are well distributed. It is not mandatory for only women to weave, there are many men who create breathtaking mats .

Raw Material

Kashmir Valley is very rich in freshwater swamps and marshes. The swamps are water logged areas with water level above the soil surface. These support reed swamp vegetation dominated by reeds, other tall plants, such as Butomusumbellatus and species of Typha, Equisetum, and Alisma, also occur occasionally.26

The Waguv reed is obtained from the wetlands nearby or from the famous Dal Lake . The scientific name for the reed is Typha Angustifolia. The reed usually grows upto the height of 6 feet making it perfect for mat weaving. The reed when looked upon closely has a mesh like structure that looks like multiple boxes stacked together. Height also plays a significant role in pricing of the reed, as the smaller length reed is available for 75 rs per louw (bunch) and longer one is available for 500 per kg. The reed is green in colour and turns yellow as it ages and is then collected by local people for either selling or making the mats. Some locals source the reed by themselves while others buy it cleaned and dried for weaving mats. The local market for reed is Shaidpur and Kawamura. Some reed is even cut when it is still green in colour as it later dries by itself turning into yellow. Drying usually takes 6-8 days. This reed is sometimes stored for upto 2 years and is used accordingly.

Waguv comprises a beautiful combination of Danighas(paddy grass) and Peich (water reed) Danighas is obtained from villages with paddy cultivation. This forms the basic structure of Waguv and also plays an important role in securing the knots.

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The main reed used is Peich obtained from Dal lake or swampy areas. It is mainly obtained from local markets where it is available cleaned and dried. The grass for average measures upto 6 feet and it takes four to five months to reach this height. Only after it reaches this height that it can be harvested to make these mats. The reed smaller than that is used for smaller mats with width of 2 feet.

Tools

Tools used are mainly locally sourced or made by the artisan himself. Tools are required to make a frame and for final cutting. A frame has 3 parts -
2 Keej(wooden poles of the frame determining the width of the mat)
2 Wagguv Loth(wooden poles of the frame determining the length of the mat)
1 Wan(reed)

For cutting locally available drought is used. Drout is a circular knife with a wooden handle which is also sourced locally only.

Stages of Production

The production process has been divided into 7 stages as under
Collection of peich(wagguv reed)
Frame making
Base making- warp
Wounun- weaving
Woudrun- securing
DaerDiyun (Gandkarun- Closure)
Saafkarun (cleaning)

Collection of Grass Reed, Peich (TyphaAngustifolia)

The local dwellers of swampy areas collect the fully grown Peich and dry it to perfection [1a, 1b, 1c,1d] , this reed is either used to make mats by the collector or it is sold in the markets of Shaidpur and Kawpura where mat weavers purchase it. Piech is mainly obtained from local markets where it is available cleaned and dried. The grass for average measures upto 6 feet and it takes four to five months to reach this height. Only after it reaches this height can it be harvested to make these mats. The reed smaller than that is used for smaller mats with width of 2 feet.Danighas(paddy grass) [2]is also bought from local markets for a price of 100- 150/ kg. The reed is stored by weavers by making

Plant Description

Typha Angustifolia a Perennial plant and grows upto 3 m (9ft) it is found in marshy lands. The plant usually flowers in the months of June and July and is monoecious (flowers are either male or female and both sexes can be found on the same plant).The plant grows in light (sandy), medium (loamy) and heavy (clay) soils. The plant cannot grow in the shade. It prefers wet soil and is found in shallow freshwater of lakes, rivers, ponds, marshes, wet meadows,

estuaries, bogs, ditches in valley marshes and wetland systems. It has sturdy roots that can extend 27 inches and are typically ¾-1½ inches in diameter. Stems are erect and range from 3 to 9 feet high and is only 5 – 12 mm thick. It has narrower leaves of up to 1/2 inch wide, rounded and thicker on the back side Leaves are plano-convex or strongly convex on the back, the leaves of plant are not edible but may be woven into mats, seats and baskets. The flowers of this plant form a cylindrical, sausage-like spike that grows upto 9 inches long and are brown in colour. The Plant has many properties such as

Plants can be a good source of biomass, and are used as a source of fuel.
The hairs of the fruits are used to make mud walls and also for stuffing pillows.
The plants have good insulating properties.
Stems and leaves can be used to make thatch,paper, and the leaves can be woven into mats, chairs, hats etc.
The pollen is inflammable and is used in making fireworks.
This extensive root system makes it good for stabilizing wet banks of rivers, lakes etc.
A single inflorescence can produce 20,000 to 700,000 small single-seeded fruits.
T. angustifolia could be used for heavy metal phytoremediation from metal containing industrial wastewater.

Making

The beautiful weave begins its journey with the making of a frame. Frame consists of 4 small poles called Keej embedded into the ground. Keej are simple wooden nail like structures that form a supporting system for the frame base. The base has two wooden poles on top and at the end called WagguvLoth[3].

The distance between two keej determines the width of Wagguv. There are two Wagguvloths in the basic frame. Wagguv Loth provides a support system on top and bottom of the basic frame. Distance between two loths determines the length of Wagguv being weaved. The frame is set according to the length and breadth of the Wagguv to be weaved.

A wooden slab is suspended between the top and bottom of the frame called Wan .Wan is a plank of wood that has holes carved in it manually by the weaver for the ropes to pass through. The wan comes in different sizes and is used according to the length and breadth of the Wagguv to be weaved.

Base Making

After structuring the frame on ground a strong warp is created. The warp is made up of dried rice straw called DaniGhas in the local language. The grass found in the villages where paddy growth is prominent. It is brought from the local markets for 100 to 150 per Kg. Dhanighas is twisted by a very interesting hand movement that consists of rubbing the two palms forward and backward resulting in entanglement of two stems together thus forming a twisted rope[4a,4b]. More stems are added if a bigger rope is required and the length can be increased to desired length. Here the rice straw rope acts as a waft in the weave. The warp is created by tying the rope on one end of the top pole to create a loop at the bottom pole. This loop is then attached to the bottom pole by tying it with grass. This creates the weft of parallel rope required for the weaving.[5a, 5b, 5c] This type of a structure not only creates a strong base but also ensures that the Wagguv weave comes out cleaner at the end portion as the rope base gets vanished into the weave. The number of parallel lines here are according to the size of Wagguv being weaved.

The ropes while creating the base are passed through Wan and acts as a reed which separates warp [6a, 6b] Wan is a piece of wood that has holes in it. The wan is of different sizes and has a

different number of holes according to the width of the mat which is to be weaved. The wan helps to give an elevation to the ropes and thus keeping the weft intact and tight which makes it easier for the weaver to weave the mat. After making the linear weft, the rice rope is stretched to tighten it more. The stretching is done two times to ensure proper structure.

Wounun (weaving)

After the rice straw warp is fixed, another daniraz is used as the first weft which later goes around the perimeter of the mat mat ensuring the weave. After this the weave from Peich is started.

The weave begins with inserting the daniraz and then the water reed is inserted through loops of danighasThepiech is inserted alternately on the strings of warp. The peich is soaked in water or is sprinkled with some water to make it soft and easy to weave. The Reed before inserting is bent on top which is called Boud. This step ensures a smooth pass for reed. Once the grass stem is passed through all loops the reed is pushed downwards with fingers. Same step is repeated till the mat is completed. As the weave proceeds towards upper Wagguv loth the wan is also pushed upwards.

Wudrun(securing)

When the mat takes a form, the grass from one side is simultaneously cut and the Paddy grass rope is twisted along up and down For the side knot making, Danighas is used but sometimes coconut rope is also used. This was introduced over years but is not popular as it being hard damages the reed. The step of side knotting is called Gabb.The extra grass here is cut with the help of Droutwhich is a local cutting tool with a C shaped curved knife. There are generally two types of weaves known as Khoushfior and Siyoudfior. Where in sayoud the Peich is passed alternately through rice grass and where as in Khoush the reed is passed through straight through weft. Sometimes the Danighass (paddy grass rope) is added in between the weave to give it a different look. The artisans call it design. For this 2 to 3 rows for Danighas are added in between. By the end of weaving a thick daniraz is taken from side panel and is continued in weave from the horizontal end and then the grass rope is extended in similar manner to secure the other side as well Twisting on the side is done simultaneously. So the rope continues by going up and then coming down to secure the Wagguv weave in a continuation. Whole securing the daniraz is cut separately from the supporting Wagguv loth on top.

Daer Diyun(gandkarun-closure)

This grass is twisted with the continued string and twisted further with other cut strings to secure the weave from top and continued to the side. When the knot is taken downwards it is connected with the lower part by twisting and then the lower part is also separated from the cloth. After the weaving part is done the finishing touches are given which is called arch kadunie; cutting the extraedgy shape and making it curvy.

Saaf karun(cleaning)

The final stage is where the mat takes its complete shape and is cleaned, any extra grass is cut for finishing and is wiped with some cloth. and rolled back for storage or exporting to the local markets. Life of Wagguv is expected to be for 6 years. It can be cleaned with cold water. Wagguv is never dried in direct sunlight as it results in damaging the grass.

FINAL PRODUCT

Final products are usually mats of different sizes. Since the demand for mats have decreased the artisans usually create miniature Wagguv which have dimensions of 4x6 and are easy to sell. Before the introduction of modern matting options the final products would include matting

for houses, matting for shikara, matting for houseboats, roof of shikara, house curtains, window pane mats. The Design intervention by some artists has resulted in the making of a false ceiling made up of Wagguv-examples of which can be found in Mc Arby's cafe (Chanapora, Srinagar). And other products like small table top mats have come into existence.

Designs & Description of Quality

The designs of Wagguv are very simple, the same weave is being used from historic times with just experimentation in shapes and sizes. however the artisans add paddy grass in between the weave to break the monotonous pattern. Since no colours are added, the mats look plain and have the same yellow golden colour. Quality is determined by the freshness of grass. Older the grass, brittle it becomes to work with which results in untidy weaving.

J) Uniqueness:

The Wagguv mat is a symbol of Kashmir's rich cultural heritage, blending traditional craftsmanship with sustainable practices and remarkable functionality. Below are the distinctive elements that contribute to its uniqueness:

1. Use of Indigenous Materials:

Typha angustifolia (commonly known as Piech) is the primary material used for weaving Wagguv. This reed, found abundantly in the marshy lands around Dal Lake in Kashmir, is naturally golden-yellow and chemical-free. Its organic nature makes the mat eco-friendly, biodegradable, and a rare find in an era dominated by synthetic products.

Additionally, paddy grass is sometimes used for binding, ensuring the product remains purely organic and free of harmful chemicals, contributing to its environmental sustainability.

2. Health and Comfort Benefits:

Thermal Insulation: Wagguv mats possess excellent thermal properties. They keep homes warm in winter and provide a cooling effect in summer, making them ideal for the harsh climate of Kashmir. This natural insulation enhances comfort, reducing the need for artificial heating or cooling.

Health Benefits: The firm yet comfortable texture of the mat helps improve blood circulation and promotes relaxation. Sleeping on a Wagguv mat is believed to alleviate back pain and support a straight posture, as there is no additional cushioning between the floor and the body, which is beneficial for the spine.

3. Sustainability:

Wagguv mats are fully biodegradable, made from naturally sourced reeds and grasses, which means they naturally decompose without harming the environment.

The lifecycle of the mat is sustainable: once worn out, the mat is repurposed for various uses. It can be used as fuel for stoves, binding material for mud walls, and fertilizer or cattle feed, ensuring that no part of the mat goes to waste.

Additionally, the absence of synthetic materials and no added dyes ensure the mat is environmentally friendly from start to finish.

4. Traditional Craftsmanship:

Handwoven by artisans: The mats are woven by hand, using techniques passed down through generations. This craftsmanship is a deeply ingrained tradition, with the Walkhur (single weave) and Seod (double weave) methods being used to create simple yet beautiful patterns.

The weaving knowledge is transmitted from mother to daughter, ensuring that the art of creating these mats remains a vibrant part of Kashmiri culture.

The use of fresh, high-quality reeds ensures that the mats are durable, flexible, and of high quality.

5. Cultural and Religious Significance:

Integral to Kashmiri life: Wagguv mats are not only practical but are also culturally significant. They have traditionally been used in mosques, temples, and Sufi shrines across Kashmir, demonstrating their importance in spiritual and cultural practices.

The mats also feature prominently in Kashmiri houseboats (shikaras), where they are often customized to fit the unique shape of the boat. This connection to local life and spirituality enhances the mat's cultural significance.

6. Aesthetic and Functional Design:

Unlike other Kashmiri rugs like Namdas or Kaleens, Wagguv mats are woven, not drawn, allowing for a cleaner and simpler design that complements a variety of interiors.

Over the years, artisans have experimented with different shapes, sizes, and even textures, occasionally adding paddy grass for visual interest. However, no colors or dyes are added to the weave, preserving its natural aesthetic.

The simplicity of the design enhances its versatility, allowing it to be used in various settings—from floor mats to wall coverings and even window panes.

7. Durability and Versatility:

Wagguv mats are known for their durability, lasting for many years under normal use. When the mat starts to wear out, it can be repurposed beneath a new mat to prevent slippage, which extends its lifecycle.

The mats are washable and reusable, ensuring that they can be maintained over time and reducing the need for frequent replacements.

8. Scientific Validation:

Studies, such as those published in the International Journal of Polymer Analysis & Characterization, have confirmed the insulating properties of Typha angustifolia. The research highlights its low thermal conductivity, making it an effective material for insulation in both household and industrial applications.

This scientific backing further supports the mat's function as a natural insulator, both in terms of temperature regulation and comfort.

Wagguv is a prime example of how traditional craftsmanship can align with sustainable practices to create a product that is not only functional but also deeply connected to the local environment, culture, and climate. Its unique blend of organic materials, health benefits, durability, and cultural significance makes it an irreplaceable part of Kashmir's heritage. Wagguv is not just a mat; it's a testament to the harmonious relationship between nature, tradition, and human ingenuity.

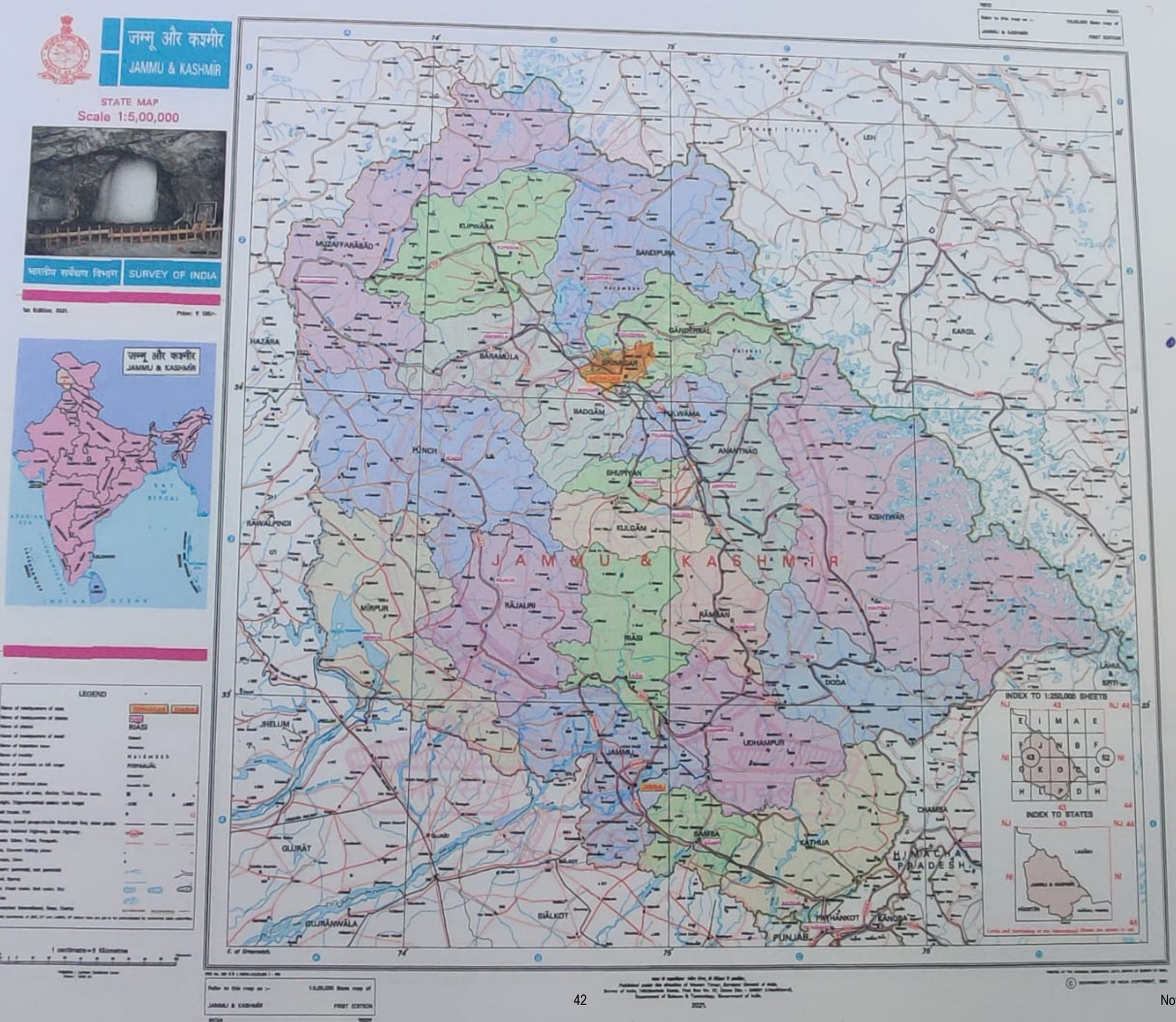
K) Inspection Body:

The proposed structure/ method of inspection and implementation of the GI

- One representative from Directorate of Handicraft and Handloom, Kashmir
- One representative from Indian Institute of Carpet Technology (IICT)
- One representative from Development Commissioner Handicrafts, Ministry of Textile, Government of India.
- One representative from Craft Development Institute, Srinagar
- One representative from "**The Wirasat Handicrafts Industrial Cooperative Ltd".**

L) Others:

FOR KASHMIR WAGGUV.



• SRINAGAR

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 870
Application Date: 13-04-2022

Application is made by The Wirasat Handicrafts Industrial Cooperative Limited at Kashmir Haat (Exhibition Ground), Srinagar, Kashmir – 190 009, Jammu and Kashmir, India for Registration in Part - A of the Register of **Shikara** under Application No. 870 in respect of Handicrafts – Shikara falling in Class – 12 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The Wirasat Handicrafts Industrial Cooperative Limited

B) Address : The Wirasat Handicrafts Industrial Cooperative Limited,
Kashmir Haat (Exhibition Ground), Srinagar,
Kashmir – 190 009, Jammu and Kashmir,
India

C) Name of the Geographical Indication :

SHIKARA

D) Types of Goods : **Class 12**– Handicrafts - Shikara

E) Specification:

The Shikara is a traditional wooden boat indigenous to Kashmir, known for its versatility and cultural significance. Primarily crafted from Deodar wood (Cedrus deodara), this boat is highly valued for its durability, as the wood does not decompose in water. The Shikara is used for a variety of purposes in Kashmir, including fishing, harvesting aquatic plants, transporting goods such as fruits, vegetables, flowers, and craft products, and serving as a popular tourist attraction on the scenic Dal Lake. The Shikara has been a crucial part of the local lifestyle and transportation in the region for centuries.

Characteristics and Parts of a Shikara:
Material: Made of Deodar wood (locally known as Divdhor), a material well-suited to the aquatic environment due to its resistance to decay.
Usage: While it was once the primary mode of transport, it is now more commonly associated with tourism, offering visitors an opportunity to experience the natural beauty of the Dal Lake and its surroundings.

Parts of a Shikara:
Brohnam: One part of the Shikara, usually referring to the hull.
Tourism: The section designed specifically for tourists, providing comfortable seating and views of the lake.
Pathnam: Another part of the boat, typically referring to the rear or back section used for various purposes.
The Shikara comes in different sizes depending on its function, ranging from small boats used for personal or local use to larger ones designed for tourists.

Construction:
Constructing a Shikara is a skilled process, requiring the expertise of highly trained carpenters. The planks of the boat are cut at various angles, and each detail is handled with great precision. This work is often a family affair, with carpenters and their families taking part in the building process. The construction of the boat typically takes place in workshops located near Kashmir's lakes, including Dal Lake, Nigeen Lake, and Manasbal Lake. These workshops, often situated in local Mohallas (neighborhoods), are the heart of Shikara production.

Shikara Workshops and Mohallas:
Dal Lake Mohallas:
Kohn Mohalla
Abi Kakpora
Dar Mohallah
Bakir Mohallah
Khand Mohallah
Batpora (Abikarpora)
Sabiri Mohalla
Nigeen Lake Mohallas:

Naideyar
Takiyah Lalchah (near Saida Kadal area of Srinagar)

Other Workshops:
Workshops are also located in the Qamarwari, Noorbagh, and Batwara areas of Srinagar.
Additional workshops are found at the periphery of Manasbal Lake, in Ganderbal.

Cultural Significance:
The Shikara is more than just a boat; it represents a cultural identity deeply intertwined with the lives of the people of Kashmir. The practice of constructing Shikaras and the boatmen's lifestyle is central to the region's heritage. These boats have long been a source of livelihood, but today, they are also a symbol of Kashmir's beauty and charm, attracting visitors from around the world who seek to experience the stunning vistas of Dal Lake and the surrounding mountains.

In essence, the Shikara is not just a means of transportation but also a living testament to the skills, craftsmanship, and cultural traditions of Kashmir.

F) Description:

The Shikara is a profound cultural symbol of Kashmir and a critical element of its heritage. As a traditional wooden boat, it has been in existence for centuries and is a testament to the intricate craftsmanship of Kashmiri artisans. The process of constructing a Shikara involves various skilled individuals, each contributing to its creation, making it a product of cumulative effort and expertise.

Raw Materials:

The primary material used for making Shikaras is Deodar wood (Cedrus deodara), a coniferous tree that is abundant in the Kashmir Valley. Deodar wood is preferred for its several qualities:

Buoyancy and Durability: Its light weight, close grains, low porosity, and resistance to water corrosion make it an ideal choice for boat construction.
Resistance to Splitting: Deodar wood is free from splitting and cracking, which is crucial for the longevity of the boat.

Insect Resistance: The natural resins in Deodar make it resistant to insect and borer attacks.
Economical: Deodar's widespread availability in Kashmir reduces transportation costs, making Shikara construction relatively affordable.

Additionally, Teak, Mahogany, and Oak are used globally for boat-making, while other types of wood used in Shikara construction include:

Ulmus villosa (locally known as bran), used for the pillars and trusses due to its strength and longevity.

Chinar wood (Platanus orientalis), used for the kalla, the ornamental part of the boat.

Construction and Joinery:
The Shikara's construction involves the use of specialized techniques and locally crafted metal nails:
Wangun: A 'U' shaped staple nail with two pronged shanks.
Naukeel nail: Thick-headed, with a relatively thin shank.
Mohuj: Nails with flat heads on both ends, secured with two additional nails.
Animal fat (goshtcharbi, sheep fat) is also applied underneath the boat's base to enhance its durability and waterproofing.

The Shikara is built with three main sections:
Brohnam (Front End): The ornamental part, with a kalla made of Chinar wood, which is intricately carved. The front point is also known as the "zero point."
Tourism (Middle Part): This area is for passengers, where comfortable seating and backrests (inspired by Mughal boats) are arranged. This is the section where tourists enjoy the stunning views of Kashmir's lakes.
Pathnam (Back End): This is where the oarsman (boatman) sits and steers the boat.

The construction process includes:
Hewn vs. Sawn Timber: Carpenters use hewn Deodar planks rather than sawn ones. While sawn timber is more economical, hewn planks last longer and are more suitable for the long-lasting durability needed for Shikaras.
Hot Nails: The nails used in Shikara construction are heated before insertion to ensure a stronger bond, helping the boat maintain its structural integrity over time.
Marking: For precise measurements, a thread mixed with the ashes of Deodar wood is used.

Design and Functionality:
The Shikara is designed for both functionality and aesthetic appeal:
Canopy: A canopy supported by four pillars protects passengers from rain and sun. The roof can be assembled or dismantled easily, as no permanent joinery is required for the pillars.
Storage: The pathnam area contains a storage compartment where the boatman stores food, valuables, and sometimes freshly caught fish.

Anchor Rings: Iron rings are fixed at the ends of the Shikara to help anchor it to the banks (ghath) of the lake.

Ornamentation:
Margola: Two wooden planks are placed perpendicular to the main frame (saar), one on each side of the tourism section. The front one is intricately carved with Kashmiri motifs inspired by nature, while the back one remains simpler.
Kalla: The kalla is an ornamental piece attached to the front, symbolizing the shape of a lotus (pamposh). It is intricately carved from Chinar wood, adding elegance to the boat.

Cultural and Economic Importance:
The Shikara is more than just a boat; it is a symbol of Kashmir's rich cultural heritage. The boat's construction reflects the region's craftsmanship, with each Shikara representing a blend of artistry, skill, and functional design. The process involves a community of workers—from carpenters to boatmen—making it a collective endeavor. As an iconic piece of Kashmir's tourism, Shikaras continue to attract visitors, offering them a glimpse into the region's beauty while maintaining its cultural traditions.

G) Geographical area of Production and Map as shown in page no:

Srinagar is the largest city and summer capital of Jammu and Kashmir, situated in the Kashmir region of the Indian subcontinent. The city lies along the banks of the Jhelum River at an elevation of 5,200 feet(1,600 meters) in the valley of Kashmir. Summer capital is situated in the centre of Kashmir Valley and is surrounded by five districts. There are a number of lakes in and around the city. These include the Dal lake, the Nigeen, the Anchar, Khusal Sar, Gil Sar and Hokersar.

Srinagar has the distinction of having a multifaceted and unique cultural blend, making it exclusive from the rest of the country, not only from the cultural forms and heritage, but from geographical, demographical, ethical, social entities, which forms a distinct spectrum of diversity. The city is the home to an extraordinary range of social, cultural and economic assets in its traditional knowledge systems, oral traditions, and in the skills of arts and crafts.

The city has a rich living heritage and could be accessed by both land and water. It emerged as a trading post and developed into an urban centre. The city was founded during the reign of Ashoka in 250 BC near Pandrethan , and the capital was shifted to the present site around Hari Parbat by Paravasena XI, in the sixth century, known as Parvapura at that time. [Alkazi, F. (2014)] 13

Geographical area of Production
The ravishing valley of Kashmir is bestowed with exquisite lakes and rivers with different hydrological settings such as Dal lake, Wular Lake, Manasbal lake, Nigeen Lake, Anchar Lake, Jhelum river etc. The main locale for the craft of Shikara is the famous Dal lake, Nigeen lake, Jhelum and Manasbal lake. Shikaras are constructed at the places around these lakes and are mostly navigated on it. The producers and boatmen(haanji community) are mainly the people living in the areas around these lakes.

Dal lake is the second largest lake in the State of Jammu and Kashmir with numerous gardens and orchards all along its shores.The lake is located on the eastern part of Srinagar city in the

state of Jammu and Kashmir, on the right bank of River jhelum. The lake has a surface area of 18-22sq km and has about 315 hectares of marshy land 12.8 percent of the total area. 1584 meters above sea level, covering an area of about 11.5 Kilometers. Dal Lake, the main receiving water body of the watershed, is situated between 34°5'-34°6' N latitude and 74°8'-74°9' E longitude at an at an altitude of about 1,584 The Dal Lake has a depth of 6 metres (20 ft) at its deepest in Nigeen lake to 2.5 metres (8.2 ft), the shallowest at Gagribal . The depth ratio between the maximum and minimum depths varies with the season between 0.29 and 0.25.[Mir Ashaq-2011] 14

Dal lake is the main locus where the Shikaras are boated. The dal is divided into more than 20 Ghats also known as yaarbal (meeting point of friends) and each ghat is assigned with 100-200 Shikaras. The ghat and navigation of shikara is managed by a foreman of that ghat which is appointed by the tourism department.

Manasbal Lake is the deepest lake of Kashmir valley located about 30 km north of Srinagar. It has predominantly rural surroundings with three villages, Kondabal, Jarokbal and Gratbal overlooking the lake. Manasbal is considered as the 'supreme gem of all Kashmir lakes' with lotus (Nelumbo nucifera) nowhere more abundant or beautiful than on the margins of this lake. It is classified as a warm monomictic lake and circulates once in a year for a short time. Close to the northern shore are the ruins of a fort which was built in the 17th century by a Mughal king to cater the needs of caravans that used to travel from Punjab to Srinagar. On the south, overlooking the lake is a hillock-Ahtung which is used for limestone extraction. The eastern part is mainly mountainous and towards the north is an elevated plateau known as 'Karewa' consisting of lacustrine, fluviatile and loess deposits.Surface area [km2] of Manasbal lake is 2.81 with the volume [km3]0.0128. The Maximum depth [m] of the lake is 13 And mean depth [m] is 4.5. Normal range of annual water level fluctuation [m] is 1.5 2.0. (World lake database) 15

After confabulating with the tourism executive, we came to know that there are almost 90 Shikaras in Manasbal lake (Tourist Reception Centre -TRC)16

Nigeen Lake, one of the basins of Dal Lake, (Lat. 34º06´N and Long. 74º45´) situated in the heart of Srinagar, the summer capital of Jammu & Kashmir, covering an area of 4.5 sq. km is a narrow stretch of water. This lake, also called as the jewel in the ring, is located in the Srinagar area of Kashmir at 1582 m above sea level. The Nigeen lake is surrounded by a large number of willow and poplar trees. Hence, it has come to be referred as a "nageena", which means "the jewel in the ring". Nigeen is connected to the lake of Dal through a narrow strait and is also linked to the Khushal Sar and Gil Sar lakes via a channel known as Nallah Amir Khan. The lake is located adjacent to the Hari Parbat hillock, to the west of the Dal lake. To its north and west lie the localities of Baghwanpora and Lal Bazar while to its north east lies the locality of Hazratbal, which is known for the famous shrine.17

Shikaras in Nigeen lake are majorly used for tourism and there are approximately 34 Shikaras that navigate on Nigeen lake. Few Shikaras are also boated on river Jhelum, but here it is mostly used for transportation purposes and not for tourism.

The Jhelum rises from a deep spring at Verinag, in western Kashmir region. The river meanders north-westward from the northern slope of the PirPanjal Range through the Vale of Kashmir to Wular Lake at Srinagar, which controls its flow. Emerging from the lake, the Jhelum flows westward and crosses the PirPanjal in a gorge some 7,000 feet (2,100 metres) deep with almost perpendicular sides. The total length of the Jhelum is about 450 miles (725 km).18

There are many ancient legends and folk narratives associated with Wular and Anchar lake; it is considered to be in a state of permanent turbulence. Enormous number of Shikaras have drowned in these lakes, due to which Shikaras no longer navigate on it.

Producers/Clusters

The workshops for the construction of shikara are located in various districts of Kashmir. The producers are outstandingly skilled carpenters living in the areas around the Lakes, the areas around Dal Lake where shikaras are constructed are Khand Mohalla, Meer Bagh, KhujarBhal, Gulshan Colony, Shabri Mohalla, Bakhri Mohalla, Batpora B-Abikarpora, and Razaki Mohalla. Naideyar, Ashi Bagh and TakiyahLalchah are the areas around Nigeen lake, it is a mildly eutrophic lake located in Srinagar, Jammu and Kashmir. It is sometimes considered as a part of Dal lake. The lake is located adjacent to the Hari Parbat hillock, to the west of the Dal lake. There is a shikara workshop in Qamarwari, Noorbagh, Batwara area of Srinagar. Apart from srinagar, workshops are also located at Ganderbal, Bandipora, Sopore, Baramulla and Manasbal.

The oresman (Shikarawala) belong to the Hanji community, called shikara hanz. Hanjis are the dwellers of water and are confined to the Dal lake, Wular, Anchar and Manasbal lakes and the Jhelum River especially between the Khanabal District Anantnag and Chattabal.

S. R. Bakshi in his book Kashmir: Valley and Its Culture mentions that Dung Hanz-in particular, has sprung the most disreputable class of boatmen who come in contact with the tourists. These boatmen are like Irish drivers and Indian barbers are great tale-tellers.19

Dal is an urban lake, situated between 34°5'-34°6' N latitude and 74°8'-74°9' E longitude at an at an altitude of about 1,584 meters above sea level, covering an area of about 11.5 Kilometers. The lake is divided by 4 basins from north to south: Hazratbal, Boddal, the Nigeen and Gagribal. Gagribal is the shallowest with maximum depth of only 2.5meters[Michael J casimir-2019]20

Number of Shikaras

Shikara is an indigenous craft of Kashmir, made from deodar wood. The carpenters who construct shikaras are eminently skilled, and have been involved in this craft since their childhood. This skill is mostly passed through generations. There are umpteen number of people involved in this craft, and thousands of families are dependent on it for livelihood. Apart from this it's a cardinal part of kashmiri heritage. '

After confabulating with Wali Mohammad Bhat, President of Shikara association, we discovered that there are more than 30 workshops of shikaras present in Kashmir and approximately 6000 Shikaras available, 4881 in Dal lake, 34 in Nigeen lake, and around 1000 in Manasbal lake(approx). Few Shikaras are also boated on river Jhelum, but here it is mostly used for transportation purposes and not for tourism.

The Dal Lake is divided into more than 15 Ghats also known as yaarbal (meeting point of friends) and each ghat is assigned with 100-200 Shikaras. Ghat number 1, near Nehru park, Ghat 9, Ghat 1 and Ghat 12 has more Shikara present.21

The ghat and navigation of shikara is managed by a foreman of that ghat which is appointed by the tourism department.

Existing Bodies of Producers

Shikara is a vital part of Kashmiri heritage, and is used for various purposes such as transportation, aquatic harvesting, vending of craft products, vegetables, fruits and flowers. It is a very important part of Kashmiri tourism and adds a lot of value to it. People from outside Kashmir come for Shikara rides.

There are 3-4 workshops in a Mohallah (neighbourhood), and the production is done in almost every district of Kashmir. People living around the Lakes usually take up this profession of Shikara making and rowing. Most of the workshops are present in the centre of Lakes and all the people in the Mohalla have their own shikaras which they use for transportation and movement of commodities.

People from the Hanji community are usually the boatmen.

Socio-Cultural and Economical Significance

Shikara construction is mostly done by the proficient carpenters. The carpentry skill and techniques have been inherited by the new generation from the old generation. And all the men of the family take part in the construction process. The wood used is from Deodar, which is grown everywhere in the valley. C. E. Tyndale Biscoe in his book, Kashmir in sunlight and shade mentions that Kashmiris were very clever with their art of boat making and had their own special way of building boats.22 Primarily used for transportation in earlier days, the shikara is used for numerous purposes today which include fishing, seaweed harvesting, carrying flowers, vegetables etc. It served the purpose of modern day school bus, ambulance, taxi and what not. With passage of time, the road transport started dominating the logistics sector and people started replacing Shikaras with cars. But one thing about Shikara that no one could replace is the royal experience one gets from ferrying in it across the majestic Dal Lake. The lake being central to the landscape of Srinagar is a main tourist attraction. Every year, a number of tourists take a Shikara ride to experience the beauty of the region to the fullest. Providing livelihood to thousands, Shikara is an integral part of Kashmiri culture. Tourists develop bonding with the boatman as he row the boat for hours and get to know more about the culture and traditions of Kashmir. Boatmen are surely the first guides of Kashmir

S.R. Bakshi in his book Kashmir, Valley and its Culture mentions that these boatmen are great tale tellers. Quaint and scandalous stories ooze out from their fertile and well-watered imagination.23

The people involved in this craft have a lot of respect for their profession. They believe that this craft is blessed as it is related to the Prophet Noah (PBUH).

Shikara owners put a lot of emphasis on decorating their Shikaras and have chosen peculiar names for them like Prince of Bombay, Tiger, Victory of love, New rose, London of Kashmir, Mastani, Titanic etc. to attract tourists.

The shikara carpenters want their children to learn this skill of Shikara making and rowing, involving them in the process at a very young age. They ask them to scrutinize, so that they develop interest and take this as a profession.

This craft provides livelihood to a large number of people. The shikara fraternity include people from different professions such as carpenters, oarsmen, upholsterers. Due to this craft they are able to provide financial support to their families, and also fund their marriages, Pilgrims, construction, education etc.

H) Proof of Origin (Historical records):

Documentation- Image archive

- Boatmen in a shikara, 1921 R.R Stewart
- Rug vendor in a shikara, 1934
- Kashmiri making food in Shikara, 1942 Lt. Eric Sutherland Lomax
- Shikara in Jhelum, 1932 R.C Mehta
- Shikara in Jhelum, Sopore 1900 Fred Bremner
- Shikara in Dal lake,1921 R.R Stewart
  a Quite a number of shikaras can be spotted in the image , plate VII- HazratbalGhat during the Fete, 1920- Cashmere, Three Weeks in a Houseboat-A Petrocokino
  b A shikara can be spotted behind the girl, plate XXI -My boatman's youngest, 1920 Cashmere, Three Weeks in a Houseboat-A Petrocokino
  c Shikaras in the background , plate VIII- Hazratbal Arriving for the fete, 1920- Cashmere, Three Weeks in a Houseboat-A Petrocokino
- Photojournalist James Burke did a photo series titled kashmir vacation for life magazine in the year 1964. The shikara can be spotted in all the images.
- A British fashion photographer Norman Parkinson did a shoot for Vogue in the year 1965 in India, in which few were shot in the dal. Shikara can be spotted in the background.
- Life magazine, photographer William Vandivert took these pictures in the year 1943 and was titled Life goes on a date in India"
- Mobile post office Nigeen Bagh,1957
- Mobile shikara post office, Brian Brake,1957
- Nalia Mar, Brian Brake,1957 Figure 13: Luxury boat trip on the Jhelum river near Srinagar, the boat is called HB Cutty Sark, Slim Aaron,1961
- Dal gate,Chris Morgan,1943
- Shop in Shikara, Srinagar,1975
- This photograph taken from Gagribal point by R.B. Holmes in 1910 showing a view of Dal lake with the "Chatte" shikar approaching the shore.
- The movie Kashmir kiKali(1964) starring Shammi Kapoor and Sharmila Tagore was set in Srinagar. Several scenes and most of the songs were shot in Dal. In the song 'Yeh chaandsaroshanchehra' Shammi Kapoor is sitting in a shikara while Sharmila Tagore is selling flowers in a boat.
- Jab JabPhoolKhile(1965) was a Hindi drama starring Shashi Kapoor and Nanda. The story is of a poor boy who was a boatman in Kashmir and falls in love with a rich tourist. In the Song, Pardesiyon se naankhiyanMilana, Shashi Kapoor is rowing a shikara without a roof.
- 19th century papermache Shikara, SPS museum.

Documentation- Historical references in books
Kashmir
Sir Francis Edward Younghusband 1909
The boatmen, who are the class with whom visitors to Kashmir come most intimately into contact, are a separate tribe from the villagers. They are said to claim Noah as their ancestor, and it is certain that if they did not borrow the pattern of their boats from Noah's ark, Noah must have borrowed the pattern from them. They are known as Hanji or Manjis, and live permanently on their boats with their families. Some of these boats will carry between six and seven

thousand pounds of grain. Others are light passenger boats. They all have their little cooking place on board, and a gigantic wooden pestle and mortar in which the women pound the rice. Both men and women have extremely fluent and sharp tongues, and have not so far earned the reputation for truthfulness. But they are quick-witted, and can turn their hands to most things, and make themselves useful in a variety of ways.

Beyond ThePirPanjal

Earnest F Neve 1912

The boats of Kashmir are flat-bottomed, with pointed bows and stern projecting over the water, and very small draught. They are of every size, from the little shikara, like a long, flat-bottomed canoe, rapidly paddled about by one or two boatmen and used for fishing, shooting and light loads of market garden produce, to the large cargo boats laden with a ton of stone or earth, great piles of timber or immense stacks of rushes or hay.

Our Summer in the Vale of Kashmir

F Ward Denys 1915

Moreover, this sail on the river takes you past all of the principal palaces of the Maharaja and his ministers, as well as the so-called European shops, that are kept for the most part by natives or Parsees, and it is in this way that much of the shopping is done by the dwellers in the houseboats, for every houseboat has its own kitchen boat and its own row- boat, which as a rule is a very comfortable affair, arranged with awnings and curtains to protect you from the sun and the glare on the river, with the rowers at either end. The rowers are really paddlers, as there is practically no rowing done, except by the students in the schools, where oars are used.

Cashmere: Three weeks in a houseboat

Ambrose Petrocokino 1917

In the afternoon, with the shikara I went for a trip up the Telbal river at the North end of the lake for about 2 miles. The ground here was thickly planted with willows and we passed a few villages of farmers with fine substantial houses. Returning we got a view of Mount Mahadev (13,000 feet) standing out on the East and to the South-West along the snow range.

Kashmir in sunlight and shade

Tyndale Biscoe 1922

The Kashmiris have their own special way of building boats, and they are very clever at their art. I have always been interested in boats and boat-building, but I had never come across boats built as in Kashmir. I have been told that the Kashmiri boatmen date their knowledge from the days of Noah, and when one looks at their big rice boats, which are uncommonly like the Noah's Ark of one's childhood, one always expects to see Noah coming out of the door of the cabin in the stern, especially when it happens to be at the time of the floods, when all the Kashmir valley is under water. When I first came to Kashmir the saw was practicallyunknown, so all the work had to be done with axes and adzes. The boatmen would go off to the deodar forests and select a large tree, say 100 feet high and from 3 to 4 feet in diameter.

When felled they would split it in half lengthways, and out of these two halves would make two planks only, by axing off all the wood on the outside until, these planks were of the requisite thickness, say three or four inches thick, according to the style and size of the boat that they were intending to build. This wicked waste of valuable cedar wood was most lamentable, but having no saws, this was their only way of securing their planks. They would then bore a hole at each end of their planks, into which they would insert short ropes, made of hazelnut branches, for hauling purposes. These planks might have to be hauled several miles to the river. The planks used to be left in the river or lake for two to three years to season. These two long

planks were to form the sides of the boat, and as they would be about seventy feet long, they would be almost sufficient for the purpose.

A history of Kashmir Political-Social-Cultural From the earliest times to present day
PNK Bamzai1962 (Page 5)
The people with whom the visitors to the Valley generally come in contact are the hanjis or boatmen of Kashmir. They are an ancient race and the Rajtarangini often mentions the Nishads (boatmen) and boat bridges." Some claim Noah as their ancestor but it is generally believed that they were Kshatriyas before their conversion to Islam. They still disdainfully refer to a novice at boat craft as a Shudra. There are many classes of boatmen generally according to the boat they play and live in. The bahts (barge) boatmen have recently taken to timber and grain trades and with the rise in their standard of life have acquired a respectability over other hanjis. The doonga and houseboat hanji looks cleaner and can speak English and Hindustani fairly well. He is intelligent and at a very short notice can perform the duties of an accomplished butler or an expert cook, a seasoned shikari or an experienced guide. Most of the visitors owe their happy and trouble-free holiday in the Valley to the hanji, though he is more sinned against than sinning. There are other classes of hanjis, e.g. Dal hanji who carry vegetables from the garden to the market and are considered the lowest. The Garihanji are those who collect the singhara (water chestnut) from the Wular Lake. The Gadahanji or fishermen are well known for their close communal feelings and generally support their brothers in distress.

Jammu, Kashmir and Ladakh
Parvez Dewan 2004 (Page 307-308)
Houseboats and shikaras

A shikara (boat) will ferry you from the road/ Boulevard to the houseboat. (This is not necessary if the boat is on the Jhelum. You can simply walk down from the Bund [embankment] to the boat.) Either way, the houseboat will be connected to firm land by a short plank. (The shikara ride to the nearest shore is normally free, if you've already checked into a houseboat or have a reservation. Obviously, it is free only on designated shikaras.)

All Kashmiri boatmen (except in Hindi-Urdu films) are Muslims, and belong to a community called hernz (silent 'r') in Kashmiri and 'han-ji in Hindi-Urdu. They all claim to be descendants of Noah. (see 'The people of Kashmir') Through history the Kashmiris have travelled-and carried grain, fruit and vegetables-from one end of the Valley to the other in boats, Large transport boats are called the bahach and can carry up to 1,000 'maunds' of grain. The doonga has a sloping roof and side walls made of matting. The boatman and his family live in the rear, the passenger in the front. 'Doongas' carry up to 200 maunds"

Shikaras are scaled-down versions of the 'doonga', meant entirely for ferrying passengers-from one bank of River Jhelum to the other if they are local passengers, and on pleasure cruises on lakes if tourists. Clothawnings are used instead of matted roofs in "shikaras'', which have low, cushioned seats for six to nine passengers. (Around four, in the case of pleasure cruises.)

While researching Kashmiri art, I came upon a 15th century painting of what is now known as the Shankaracharya hill. It showed several shikaras floating on the Dal Lake. So, shikaras are at least that old.

The People of Kashmir (Page 359)

The Hanjis: The Hanjis are a very poor, mostly illiterate, people who live in boats on the lakes and, sometimes, rivers of Kashmir. Tourism has brought some prosperity to some Hanjis living in Srinagar, though.

Lakes of Jammu and Kashmir

Kashmir Houseboat and Shikara

Houseboats and the Dal Lake are widely associated with Srinagar and are nicknamed “floating palaces”, built according to British customs. The houseboats are generally made from local cedar-wood and measure 24-38 meters (79-125 ft) in length and 3-6 meters (9.8-20 ft) in width and are graded in a similar fashion to hotels according to level of comfort. Many of them have lavishly furnished rooms, with verandas and a terrace to serve as a sun-deck or to serve evening cocktails. They are mainly moored along the western periphery of the lake, close to the lakeside boulevard in the vicinity of the Dal gate and on small islands in the lake. They are anchored individually, with interconnecting bridges providing access from one boat to the other. The kitchen-boat is annexed to the main houseboat, which also serves as residence of the boat keeper and his family.

Each houseboat has an exclusive shikara for ferrying guests to the shore. A shikara is a small paddled taxi boat, often about 15 feet (4.6 m) long) and made of wood with a canopy and a spade shaped bottom. It is the cultural symbol of Kashmir and is used not only for ferrying visitors but is also used for the vending of fruits, vegetables and flowers and for the fishing and harvesting of aquatic vegetation. All gardens in the lake periphery and houseboats anchored in the lake are approachable through shikaras. The boats are often navigated by two boatmen dressed in “Phiron’’ (traditional dress) and carry “Kangris’ or portable heaters on the boat. A shikara can seat about six people and have heavily cushioned seats and backrests to provide comfort in Mughal style. All houseboat owners provide shikara transport to their house guests free of charge.

The shikara is also used to provide for other sightseeing locations in the valley, notably a cruise along the Jhelum River, offering scenic views of the Fir Panjal mountains and passing through the famous seven bridges and the backwaters en route.

KASHMIR: It’s Cultural Heritage

KAUMUDI 2005

A metalled boulevard runs round it, like an encircling ring of silver, connecting the various beauty-spots with each other. On Sundays and other public holidays, streams of holiday-makers are seen thronging their way to these gardens, either by road or through waterways, by shikaras and doongas.

Boatmen and status of Dal Lake and its environs: A tale of Srinagar

Shahab Fazal, Arshad, 2013

Hanjis and their origin :

The boatmen of Kashmir are known as Ha’enz in the local language and Hanji in the Hindi script. They are also called Kishtiban (boatman) or Jalbashi (water-dweller). Hanjis are among the aboriginal. Inhabitants of the Kashmir Valley and are a prominent tribe of the Valley. They are inhabitants from the ancient past and could be traced also from Pandit Kalhana’sRajatarangani, of 826 BC which is the first historical record written on the Kashmir Valley. Going through the history of Kashmir, Hanjis are said to be the descendants of the Nishada tribe, who were either kinsmen or contemporaries to the Naga Race,referred in their account as the premier chieftains of this place. This suggests that these people (Hanjis)are among the earliest settlers of the valley. They draw their livelihood from the lake and carry out

activities such as: water transporters, fishermen, vegetable growers, wood-cutters, grain-carriers, dealers of construction materials, collectors of various lake products, paying guest keepers and tourist guides,etc. The Hanji's are considered to be strong and hard-working people who have mastery in the art of living on water and know the real depths and mysteries of the lakes and rivers (Ray, 1970).

Socio-economic Profile of the Hanjis

On the basis of different economic activities Hanjis can be categorized into eight categories, they are:DembHa'enz (vegetable growers), GariHa'enz (water-nut gatherers), DungaHa'enz (owners of passenger boats, dunga), Ma'erHa'enz (boatmen of Ma'er Nallah), GaadHa'enz (fishermen), Haka Ha'enz(collectors of wood from water bodies), Shikara Ha'enz (Shikara owners) and Houseboat Ha'enz(Houseboat owners).Hanjis have been identified as a separate caste in the state of Jammu and Kashmir. They are a unique homogeneous community, pursuing a common name, traditions, ceremonies, rituals and performing common traditional occupations. They have several sub-castes based on different occupations, which they have been carrying on traditionally (Sufi, 1949). Hanjis are located in pockets, locally known as mohalla within Bud Dal and LokutDal municipal wards of Srinagar city. The important mohallas with Hanji Concentrations are Kohn Khan, Mir Mohalla, Abi Kakpora, Dar Mohalla, Nishat, Shalimar; lying on the periphery of the lake and the localities, namely, Bujal Mohalla, Gogal Mohalla, Bakir Mohalla, lying further in the interior of the lake. The form, structure and size of these Mohallas vary from one locality to the other. Some localities are big, consisting of more than a hundred households while some others are as small as 5 to ten households only. The Dal Gate and Gagribal area of the lake is having high concentration of Hanjis. As per 2001 census of India, the Hanji population living in the lake and its periphery was about 135thousand (which is currently estimated to be nearly 175 thousand and was only 70 thousand in 1980,showing a rapid increase of the Hanji population). The sex ratio among Hanjis was 919 males per 1000females, and about 61 per cent of the population is in the productive age group of (15–59 years). The Literacy among Hanjis of the Dal Lake is poor, being only about 24 per cent, which is much below the national average. There are an estimated 4210 permanent houses and 3493 temporary (kutcha huts)houses and the rest of the households live in the lake itself in their house boats with their families. The Hanjicommunity depends on the Dal lake for their sustenance and utilizes the lake in different ways. Hanjis have limited land holding for their agricultural activities where most of the land is in the form of open water. A section of the Hanji community has property rights over 300 hectares (6000 kanals) of agricultural land and 670 hectares (13,400 kanals) of the water area. There are more than 775 houseboat owners, about 400 dunga boat owners. In general, the housing condition of the Hanjis is reasonably good. The Hanji are engaged in the tourism industry and possess better houses as they live in their luxury houseboats. The Hanji localities, although dispersed in their location within and around the Dal lake, connect themselves mainly by the waterways and rarely by land routes. In fact they are embedded with lake environment so strongly that the traditional Hanjis rarely come out of their lake houses. But with increase in population and increased and contested dependence on the Dal Lake, the lake environment (both physical as well as economic) is under severe stress. The available basic civic amenities and facilities are poor and it has further deteriorated with increase in population and their activities. So Despite these Hanji localities being within the urban limits, they are deprived of most of the civic benefits of the city. They still follow the traditional way of life and continue to be one of the backward communities of Kashmir

The boats of the Hanjis:

Shikara: These are the long boats which are used for sightseeing on Dal Lake. They are also used as a medium of transport on the lake. There are presently about 2000 shikaras in Dal Lake.

Houseboat: A Houseboat is a boat that is designed to be used primarily as a human dwelling as well for accommodating tourists. There are presently about 1200 houseboats on Dal Lake.

Shikara rents:
Peak tourist periods:
500–600 per day
Lean periods:
50–100 per day

GENERAL HISTORICAL DEVELOPMENT OF THE CRAFT OVERTIME

The structure of shikara has evolved to the refined form we see today. Ferrying across the beautiful lakes and rivers, the design of Shikara has advanced overtime. Initially, the roof of the boat was made of Wagguv. Numerous pictures in the historical records depict the use of it in construction of Shikara. The mat made of entwined reed and rice straw proved to be a good roof material. The Reed used for the purpose was supplied mostly by the Dal Lake. After the downfall of the craft and with more and more Wagguv artisans leaving the craft, the use of this craft in Shikara was given up.

Earlier Shikara used to be of different sizes depending upon the usage, it would vary from 20 feet to 45 feet, now they have standardized the size to 24 feet and 30 feet. Used mainly for transportation and movement of commodities, in the beginning less focus was given on decorating the Shikara and thus their design was very simple. They were very plain and colourless. With time, these boats gained popularity and along with being used for seaweed harvesting, fishing and transportation, they became a major tourist attraction. People from all around the world would experience the royal Shikara ride, gliding serenely over the pristine Dal Lake. This led to people focusing more on making the Shikaras more aesthetically pleasing, using all sorts of decorations and embellishments. People started colouring the plain Shikaras with bright paints and adding luxurious cushions for comfort. The vibrant print on the cushions and curtains made the Shikara more appealing and opulent.

In Ain-e-Akbari by Abul Fazal, he delineates that all trades in Kashmir were made through boats. Proper roads and vehicular transport were not there at that time so boats were used for all transportation and movement of commodities24

Earlier shikara interstices were restored by using mud as it has a high tendency to prevent water penetration,but nowadays a locally available grass is used to mend cracks in the shikara.

I) Method of Production:

Raw Material

Wood

Kashmir valley is incomplete without its tranquil water bodies and lustrous display of deodars on majestic mountain ranges. Deodars or Cedrusdeodara, a species of cedar native to western himalayas, locally known as “Divdhor”(fig 20) is the primary raw material in shikara making. The Deodar Cedar can be found at elevations ranging from 3,500 - 12,000 feet. It is a typical, upright, tree-form of Himalayan cedar with long, silvery gray needles. This conifer is known to be exceptionally cold-hardy and well-suited for consideration in colder climates. Deodar is highly durable, rot resistant and has anti fungal properties, which make it ideal wood for making

shikaras. This species of cedar is also used for the construction of boats and houseboats in Kashmir.

It is a locally available tree, and is of very low maintenance. Deodar has high float-ability and its odour prevents it from the bugs. Planks of deodar for shikara making are usually hewn not sawn. Considering the price of deodar, sawn timber is economic since it makes most out of the log, but hewn planks last longer than the later. The planks should also be knot free as it damages the boat over the course of time.(Kashmir in sunlight and shade, C. E Tyndale Biscoe)25

To purchase Deodhar wood from local timber factories, Artisans have to handover the documents stating the purpose of purchase, and their registration of the workshop. The supply of deodar is overlooked by a government body which has the power to cease the raw material if the artisan fails to proffer necessary documents. The hewn timber comes in three different sizes 14', 17' and 20'. The width varies from 1' to 2', while the thickness of the plank is 1 ½" and roughly 1.2 lacs of Indian rupees goes into the purchase of deodar planks. Apart from deodar, the other wood used in the construction of pillars and trusses of the roof is brun (Ulmusvillosa), the cherry-bark, it is a locally found tree with a hard wood, it is known for its strength and longevity.

Chinar wood, Platanusorientalis or Oriental plane is used to construct ornate part of shikara, kalla or thand- e- kalle, this part is intricately wood carved.

Nails

The wooden planks are attached with the help of specially made metal nails(fig 21b)
Wangun: U shaped staple nail with two pronged shanks
Naukeel nail: Thick head with relatively thin shank
Mohuj: Nailheads of this type are flat on both ends and are secured by two other nails.
There are not many blacksmiths left in the valley who make these custom-buil nails for shikaras.

Paint

7 litres of flamboyant paint and polish is required for a shikara.

Charbi

A generous amount of animal fat(fig 21c) is layered underneath the base of the boat. Mostly the fat of sheep is melted and used for the process.
Adhesive: It is used to further strengthen the joints.
Namwader: It is a metal stripe used for the protection of shikara.

Tools

Shikara making is a very technical process and it requires tremendously skilled carpenters. The tools used in the construction of a shikara are similar to the tools of a carpenter(fig 21a).

Wanpun: It is used for marking, it is a thread mixed with the ashes of deodar wood.
Measuring tape
Handsaw
Chisels: Four types of chisels are mainly used in shikara making, Muristoor(mortice chisel) patoez(Firmer chisel), Kiltorach(pointed chisel used for making holes for nails) and tramtoras (slick chisel)
Hand plane
Hammer

Clamp
Toor (axe)

Sourcing
Deodar wood is mostly sourced from Tailbal, Dargah, Chatchbal, and Parimpora(timber factor). Nails from Safakadal, namwader from Naupora and Paint, oil and adressive from the local market of downtown.

Pash(side panel)
The side panels which are Plano convex in shape are called pash(fig 22). A pair of pash is made by the carpenters, one for each side. It goes along the length of the boat connecting the bow and the stern. It is widest at its centre with one and a half feet and narrower as it approaches bow and stern. The end touching bow is 2 1/2" wide, while the stern end is 3 1/2". Firstly wooden planks are attached side by side, here the planks are cut at an angle of 20° and joined with wangun and naukeel. Wangun the staple nail is hammered perpendicular to the surface, while naukeel is always nailed at an angle. As deodar is brittle in nature, the metal nails are hammered red-hot and water is immediately poured on them to prevent it from burning the planks. Once it cools down, the nails contract and enhance the grip. Considering the length of deodar planks, another unit of planks is to be attached to attain 30' length. Usually three units of planks are attached together to form a pash. This process is called hangniwat(fig 23). Here the units are cut and interlocked like a jigsaw puzzle and naukeel and wangun are nailed to reinforce the lock.

Dum(base or flooring)
The base or flooring of shikara is called dum(fig 24). It is convex in shape, widest at the centre with 3' 4", it narrows down as it approaches the ends. Planks are joined together in a similar way as it was done in the construction of pash(fig 25). Hangniwat is also done to attain the length of the dum. Once the convex base is formed a heavy stone or metal chunk is placed in the centre to bend the plank. Gradually the heaviness weighs down the centre and simultaneously the bow and the stern gets raised. Once the base attains the shape, it is attached with pash(fig 26).

Saar fixing(Partition/division of space)
A shikara is divided into three parts, the brohnam, front part of the shikara, tourism or the sitting area and pothnam the stern part(fig 27). 'Broh' means front and 'poth' stands for back. Unlike a canoe or a rowing boat shikara does not have ribs on the hull, instead deodar planks of width 5" are fixed on top of the vessel, connecting both side panels. Saar is fixed in the centre, front and back with specially made nails called mohuj. Apart from reinforcing the shape of shikara, it also creates a division of space in shikara. Saar in the front divides brohnam and tourism, the one in the centre divides tourism and pothnam. Another Saar is fixed in the middle of pothnam.

Kalla(ornamnetal part of bow)
Kalla or tandkalla(fig 28a) is an ornamental piece fixed on the brohnam and is found on every shikara. The shape of kalla is inspired from pamposh (Lotus) and is made out of chinar wood. It is intricately carved, the motifs are mostly inspired from the aquatic flowers present in Kashmir. Chinar wood is mostly used for decoration purposes, as it is a lace wood,and the carving done on such a type of wood is easy and fine.

Wru(ornamnetal part of stern)

While kalla stands tall in the bow of brohnam(front part), carved deodar is placed on the stern part, for adornment, this part of shikara is called wru(fig 28b). Wru is less ornate than kalla(front ornamentation part). Wru and kalla are made and attached simultaneously on the boat.

Thaand(storage)
Shikara also has a storage area right behind cushioned seats, in the pothnam area. Boatmen keep their food and valuables inside this locker. It comes with a lid and the width is approximately one and a half feet. Storage box is fixed close to the centre of the boat, where the dum and pash is at its widest. Boatmen also store freshly caught fish occasionally.

Chaav(extension of side panel)
Wooden panels carved symmetrically and attached on pash of the tourism section. Although it increases the height of side panels, it is principally done for aesthetic purposes.

Seats
The sitting area of a shikara is inspired from Mughal grandeur. There are three seats, two in tourism area and one in brohnam. Dimension of seats varies from one to five ft. The longest seat also comes with a back support, where tourists can sit back comfortably while the shikara ferries through the serene Dal. Other seat in the tourism area is separated by a gap of 2' and is one and half feet wide. People sit face to face in the tourism area. The third seat is placed on brohnam and is a feet wide.

Margola
Two wooden planks placed perpendicular on the saar, one on either side of the tourism part. The one at the front is usually intricately carved with beautiful kashmiri motifs, while the one at the back is plain(fig 29).

Naamwader(Metal plate)
A metal plate is fixed on the end of the bow, to protect it from dings and dent. Two metal stripes also run underneath the brohnam with the same intention. At times artisans also add metal stripes under pothnam as well.

Pillars and roof
Shikara has a curved roof and is called tuff(fig 30). Straight Bren planks are attached perpendicular to another set of planks cut in the shape of an arc. These arched ribs assist in attaining the semi circular shape to the roof. Shikara has four pillars, two between brohnam and tourism and two in the middle of tourism and pothnam, which holds the curved roof. The straight planks used on both ends are of deodar, while the rest of the structure is made out of Bren. Locally known as Bren, the cherry bark(ulmusvillosa) is less durable compared to deodar. The pillars and roof can be dismantled or assembled, since no joinery is involved while fixing the pillars onto the boat. Four holes are burrowed on the saar, one for each pillar to hold the structure.

Charbi(fat)
Once the structure is complete, a generous amount of animal fat is layered underneath the base of the boat. Charbi or the sheep fat is bought locally for 200 rupees, to coat the wooden planks. The fat acts as a protective layer on the planks and increases the durability of deodar.

Farsh(flooring)

Entire length of shikara is layered with another set of wooden planks as flooring(fig 31). These act as a protective layer for the base and can be detached when required, since it is not nailed to the base.

Paint

Once the fat is dried, the boat is coated with waterproof paint of vivid hues. Three coats of paint are layered directly onto the planks usually without covering the surface with a primer. Roughly 7 litres of paint is required to cover a shikara(fig 32). Yellow paint is widely used along with other vivid hues.

Humtul(Paddle)

The heart shaped paddle called Humtul (fig 33) is also made of deodar. The handle and blade are made separately and joined together by metal nails. While the heart shape is carved out, extra wood is kept in the dent of the heart. This wood is attached to one end of the handle, which is also cut at an angle.

Repairing

Over the course of time a gap is formed between wooden planks. After 10-15 years, when shikaras come for repair, plant fibres are twisted, made into a rope and hammered between wooden planks, to bridge the gap. Locally available plant fibres are used for this process.

FINAL PRODUCT

Final product of the whole process is a wooden boat, Shikara. The boat is made of Deodar cedar wood and is navigated on Dal Lake. It can be erected in different sizes, depending upon its use. Standard size of a shikara is 30 feet, but it can be 25 feet and 40 feet also.

The shikara is used for transportation, aquatic harvesting, fishing, vending of fruits, craft products, vegetables and flowers. Dal Lake is one of the Main tourist attractions, and shikara has played a very vital role in attracting tourists. Every year, a number of tourists take a Shikara ride to experience the beauty of the valley to the fullest. Each houseboat has its own shikara for ferrying guests to the ghat (bank). In the book lakes of Kashmir, Mir Ashiq Hussain endorsed that a shikara is the cultural symbol of Kashmir and is used not only for ferrying visitors but is also used for the vending of fruits, vegetables and flowers and for the fishing and harvesting of aquatic vegetation.

Designs & Description of Quality

Construction of shikara is done by supremely skilled carpenters. Contriving is very technical and takes 15 days. It is divided into three parts, Brohnam(front end) where kalle, ornamental part made from chinar wood is affixed, it is a lace wood and intricate carving is easily done on it,tourism(middle part) is for the passengers, where the seating is arranged by orienting cushions and upholstery, it has a back rest inspired from the Mughal luxury boats and patnam(back end)is where the shikara oarsman sits. Shikara has a vibrant coloured Canopy supported on four pillars. The shikaras are painted in bright colours, and few parts of it are hand carved, and hand painted to attract tourists. At the ends of shikara, iron anchor rings are fixed, which are used to fasten the shikara on the ghat(banks).

Quality is determined by the raw material used. The shikara boat is made from the finest species of Pinaceae, Cedrusdeodara, it is a soft wood, with high float-ability and longevity. It is not decayed by water and has an odour that prevents it from wood bugs. The pillars and trusses of the roof are made with UlmusVillosa, locally known as bran, cherry-bark; it is a

species capable of remarkable longevity and strength. All the nails are uniquely made to avoid any impairment.

J) Uniqueness:

The Shikara is one of the most iconic cultural symbols of Kashmir, deeply intertwined with the region's identity and heritage. This traditional wooden boat is primarily constructed from Cedrus deodara (locally known as Divdhor), a type of conifer that grows abundantly in the Kashmir Valley. The Shikara serves a variety of purposes, including transportation, fishing, and vending of fruits, vegetables, and flowers. It is also a popular mode of tourism, offering visitors a chance to experience the royal ambiance of Dal Lake while cruising through its calm waters, with majestic mountains and picturesque ghats in the backdrop.
Raw Materials and Design:
The design of the Shikara is distinctive compared to boats found outside the valley, and its materials contribute to its functionality and beauty:

Cedrus deodara (Divdhor): The primary material for constructing the Shikara, this wood is known for its lightness, close grain, low porosity, and low expansion and contraction. These properties make it ideal for buoyancy and durability on water. The longevity of the wood ensures that the Shikara can withstand the elements, making it a reliable vessel for use on lakes like Dal.

Chinar Wood (Platanus orientalis): Used for the kalla, the ornamental front part of the Shikara. Chinar wood is known for its intricate carvability, allowing artisans to create stunning wood carvings that add to the boat's aesthetic appeal. The lace-like texture of Chinar wood makes it perfect for detailed designs inspired by nature, a hallmark of Kashmiri craftsmanship.

Ulmus Villosa (Bran or Cherry-Bark): This strong, durable wood is used for the pillars and trusses of the Shikara's roof. Known for its remarkable longevity, bran wood supports the canopy, which is a striking feature of the boat, adding to its royal charm.

Craftsmanship and Ornamentation:
The Shikara is not just functional; it is a work of art. Several intricate design elements enhance its beauty:

Flamboyant Canopy: The Shikara features a canopy supported by four pillars, which provides shade and protection for the passengers. This canopy is often elaborately designed and serves as one of the boat's most eye-catching features.

Bright Colors and Carvings: Shikaras are often painted in vibrant colors to attract tourists. Additionally, certain parts of the boat are hand-carved with exquisite Kashmiri motifs, typically inspired by nature and local traditions, further adding to the visual appeal of the boat.

Intricate Wood Carving: The kalla, or ornamental front of the Shikara, is beautifully carved, often depicting intricate patterns inspired by local flora and fauna. This kind of woodwork is a testament to the skill and artistry of Kashmiri craftsmen, reflecting the region's deep-rooted tradition of fine craftsmanship.

Cultural Significance:
The Shikara is not just a mode of transport; it embodies the cultural heritage of Kashmir. Historically, it has been used for everyday tasks such as fishing and transporting goods across

the lakes, but in modern times, it has become a key part of Kashmir's tourism industry, attracting visitors to experience the unique charm of Dal Lake and the surrounding valley. The decorative elements, functional design, and use of high-quality local materials make the Shikara an enduring symbol of Kashmiri craftsmanship and a key feature of the region's identity.

In essence, the Shikara is a perfect blend of functionality and artistry, making it an iconic and culturally significant vessel that continues to represent Kashmir's rich heritage.

Shikara, a wooden boat made of cedrusdeodara, locally called as divdhor, is one of the pre-eminent cultural symbols of the valley. It is navigated on Dal lake and is used for various purposes such as Transportation, fishing, vending of fruits, vegetables and flowers. It is also used to attract tourists and cruising on the shikara with the ambiance of royalty over the dal lake, passing through the astonishing mountains and the ghats of the valley.

The overall design and raw material of the shikara is different from the boats outside the valley, it is made from the wood of CedrusDeodara, locally called "Divdhor", the tree is found in abundance in the valley and is among the best timbers produced here. It is known for its longevity. Being a conifer, the wood is light, has close grains, is less porous, has low expansion and contraction coefficient which makes it float successfully over the water bodies. For the ornamentation part (kalla), Platanusorientalis, Oriental plane, locally known as chinar wood is used, as it is a lace wood and intricate wood carving could be done on it easily. The pillars and trusses of the roof are made with UlmusVillosa, locally known as bran, cherry-bark. The canopy supported by four pillars is flamboyant. The shikaras are painted in bright colours, and few parts of it are hand carved, intricately with beautiful Kashmiri motifs.

K) Inspection Body:

The proposed structure of inspection and implementation of the GI:

- One representative from Directorate of Handicrafts and Handloom, Kashmir
- One representative from Indian Institute of Carpet Technology (IICT)
- One representative from Department of Tourism, J&K
- One representative from Development Commissioner Handicrafts, Ministry of Textile, Government of India.
- One representative from Craft Development Institute, Srinagar
- One representative from The Wirasat Handicrafts Industrial Cooperative Ltd.

L) Others:

FOR SHIKARA

जम्मू और कश्मीर
JAMMU & KASHMIR

STATE MAP
Scale 1:5,00,000

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LEGEND

RIASI

PIMPANJAL

1 centimetre = 5 Kilometres

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Department of Science & Technology, Government of India.
2021.

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- SRINAGAR
- GANDERBAL.

DIRECTOR
Handicrafts & Handloom
Kashmir

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 902
Application Date: 01-06-2022

Application is made by The Wirasat Handicrafts Industrial Cooperative Limited at Kashmir Haat (Exhibition Ground), Srinagar, Kashmir-190 009, Jammu and Kashmir, India for Registration in Part - A of the Register of **Gabba** under Application No. 902 in respect of Carpets, rugs, mats and floorcoverings falling in Class – 27 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The Wirasat Handicrafts Industrial Cooperative Limited

B) Address : The Wirasat Handicrafts Industrial Cooperative Limited,
Kashmir Haat (Exhibition Ground),
Srinagar, Kashmir-190 009,
Jammu and Kashmir, India

C) Name of the Geographical Indication :

GABBA

D) Types of Goods : **Class 27**– Carpets, rugs, mats and floor coverings.

E) Specification:

The Gabba is a unique and traditional Kashmiri craft, known for its use of upcycled old tweed fabrics and woollen blankets to create colorful, hand-embroidered floor coverings. Historically, it was an inexpensive form of matting that held a central place in Kashmiri households, valued both for its utility and its aesthetic appeal. The Gabba showcases the resourcefulness of the Kashmiri people, transforming old, discarded textiles into beautiful and functional pieces of art.

Materials and Construction:
A typical Gabba is created by stitching together old woollen blankets, often referred to as "pout" in Kashmiri. These old blankets, or a combination of blankets and tweed fabrics, are stitched into a single mat, which is then dyed in dark colors to conceal stains. The mat is glued to a jute lining, which provides sturdiness and is then cut into the desired shape and size. The use of locally available materials is one of the most notable aspects of this craft, making it an environmentally conscious form of production that also reflects Kashmiri ingenuity.

Types and Designs:
Gabbas come in a variety of forms, with different techniques used for decoration:

Applique: Pieces of dyed blankets are cut and sewn onto the mat, often forming intricate geometric or floral patterns.
Embroidery: Hand-embroidered with Aari (tambour needle) using colored yarn, the embroidery is typically done in chain stitch, creating vibrant and detailed motifs.
Combination of Applique and Embroidery: Some Gabbas feature both applique and embroidery, combining the two techniques to create more complex and visually appealing designs.
Tracing: Some Gabbas also include a technique of tracing, where designs are drawn and then embroidered over.

The designs on Gabbas are primarily nature-inspired, with floral motifs, patterns derived from animal and insect life, and other elements of the local environment. One of the most famous and recognizable designs is the Dal-Guldar, which features a circular star design in the center, often referred to as the chand. These designs reflect the beauty of the Kashmiri landscape and the deep connection the people have with nature.

Sizes and Shapes:
Gabbas are made in various sizes and shapes, with the most common design consisting of a central medallion placed within a rectangular field that is bordered with intricate patterns. However, the craft is not limited to one specific shape, and modern Gabbas may also include cushions, furnishing fabrics, and rugs that resemble traditional Gabba designs.

Craft Clusters and Local Production:
The craft clusters for making Gabbas are primarily located in Anantnag and other areas in Kashmir. The craft involves a collaborative process where skilled artisans carefully handcraft each piece, often taking considerable time to complete the embroidery and applique work. The warmth of the woolen material combined with the intricate embroidery makes the Gabba a distinctive and cherished piece of Kashmiri culture.

Modern Evolution:
In recent years, the traditional Gabba rug has seen an evolution, with chain stitch rugs now being more widely produced. Additionally, items such as cushion covers and furnishing fabrics have been added to the product range, allowing the craft to adapt to modern needs while still preserving its traditional roots.

Overall, the Gabba is a testament to the Kashmiri people's craftsmanship, resourcefulness, and connection to nature. It remains a beloved and functional art form that beautifully combines the rich cultural heritage of Kashmir with sustainable practices.

F) Description:

Gabba is an upcycled floor covering made with great artistry. It is the dexterity of stitching old woollen fabrics together to create a carpet used by common man to keep the room warm in long and harsh winters of the valley. This craft is created out of dissipated products. Old pieces, waste wool, tattered shawls etc are collected, dyed and stitched together to create this product. Gabbas are either embroidered or appliqued and are made in different sizes depending upon the size of the room. Parvez Dewan in his book Jammu, Kashmir and Ladakh, mentions that a Gabba is a rug which is either made of old, recycled woollen blankets or of shreds of pattu (local tweed). Gabba is generally called carpets for the common man. Gabbas started out as rugs for the poor man. As they grew in elegance, even the rich started buying them. Towards the last quarter of the 19th century they started being made in Baramulla and, by the 20th century, in Srinagar. The art would have died out but for the patronage of RanbirSingh (1857

85). The Maharaja invited to Srinagar the four best Gabba makers of Anantnag to make tents (shamianas) and floor coverings for the government. The Dogra rulers were fond of this craft. (ParvezDewan)

Raw Material

Base fabric:
Old fabrics are upcycled to manufacture Gabba. Lois, waste wool, threadbare textiles etc are collected, dyed and stitched together to create this product. The base of the upcycled rug is either made of old, recycled woollenlois (blankets) or of shreds of pout (local tweed). The contemporary gabbas use broad-cloth and barack blankets, instead of old blankets as their raw material. The different pieces of textiles are agglutinated together with a differentlymade paste of rice flour and water, which is further bastened and attached to the lining. The lining is made of jute, it gives strength to the pieces joined together. The jute lining is sewn onto the reverse of Gabba and sometimes this lining is filled with wool to give the gabbá a soft, cushioned feel. The blankets are then washed, milled and dyed.

Technique
The upcycled rug has a unique production technique that is simple and eco-friendly. The process requires collecting old rugs or scraps from old pherans that are glued together by homemade adhesive and then stitched together with woollen yarn. The mat created is dyed in black colour and beautified with chain stitch. Gabbas are made in a variety of ways such as applique, embroidery, combination of both applique and embroidery. The Dal-Guldar is a popular design with a circular star in the middle called the chand, the designs are inspired by natural scenery, animal and insect life and other crafts.The main technique is the patching and stitching of old rugs together to create a new one. This upcycling technique results in beautiful rugs that are colourful and inexpensive.

Gabba is prepared from old woollen blankets in different designs.The industry created a new class of tradesmen known as Zachagarus. They moved from area to area to collect the old blankets and sell them to Gabba manufacturers. As Srinagar was the centre of religious activities, it was easier for them to sell their products at good prices. The work mainly was opted by the rural population. The famous and best quality of Gabba is manufactured indistrictAnantnag of the valley.(Andrabi, D.S.D.A., 2017.)

Handmade and Eco friendly
Gabba is handmade by upcycling old rags. The process of this beautiful craft is made by local artisan without any assistance from modern day machinery. The rags collected for making Gabba are stitched with hands and the embroidery is also hand done. The glue used is made by the artisan himself. The adhesive consists of rice flour and water cooked together which is harmless to the environment. For an authentic Gabba, natural wool yarns are preferred over nylon yarns.

One of the chief characteristics of Gabba rug is that the rug is not only upcycled but is repairable by patching and the damaged portion gets merged in beautiful chain stitch embroidery. Hence the life cycle is further increased making it long lasting and environment friendly.

G) Geographical area of Production and Map as shown in page no:

Srinagar and its Role in Gabba Craft

Srinagar, the summer capital of Jammu and Kashmir, is renowned for its cultural richness and artisanal heritage. Located at an elevation of 1,585 meters (5,200 feet) above sea level, the city sits along the banks of the Jhelum River, surrounded by iconic water bodies such as Dal Lake and Nigeen Lake. Srinagar is not only a hub for tourism but also a center for traditional crafts, including Gabba making, a craft deeply embedded in the city's history and economy. This craft involves repurposing discarded wool into vibrant rugs and mats, reflecting both sustainability and artistic ingenuity.

The urban clusters of Srinagar have long been centers for Gabba craft. Notable areas include Downtown Srinagar (Shahar-e-Khas), where localities such as Eidgah, SafaKadal, and ZainaKadal house families skilled in wool recycling and embroidery. These neighborhoods are densely populated, allowing for collaboration among artisans and facilitating the collective completion of Gabba pieces. Similarly, Rainawari, situated near Dal Lake, is home to workshops that specialize in intricate floral and paisley designs, blending traditional motifs with modern aesthetics. Emerging hubs like Bemina and Batamaloo have also become focal points for Gabba production, particularly for larger rugs tailored for export markets.

Srinagar's artisans are known for their expertise in creating Gabbas that combine geometric patterns with floral designs, inspired by Mughal art and Kashmir's natural beauty. The raw material for Gabba craft—discarded woolen textiles is sourced locally, thanks to the city's extensive markets and urban infrastructure. Artisans repurpose these materials into durable, visually appealing products, emphasizing eco-friendly practices. The embroidery, often performed by women, is marked by precision, with dense stitching ensuring the product's longevity and uniqueness.

The city's infrastructure and market access further enhance its role in promoting Gabba craft. Markets such as Koker Bazaar, LalChowk, Polo View, serve as key platforms for selling these handmade products. Government initiatives, spearheaded by the Department of Handicrafts and Handloom, provide artisans with access to training programs, workshops, and marketing opportunities through craft fairs and exhibitions. These efforts aim to sustain traditional practices while adapting them to modern consumer demands.

However, challenges persist. The increasing urban congestion in Srinagar limits the workspace available to artisans, while rising raw material costs strain their economic viability. Moreover, the influx of machine-made alternatives poses a significant threat to the craft's sustainability. Despite these obstacles, the resilience and creativity of Srinagar's artisan community continue to keep the tradition of Gabba making alive

Anantnag is situated around 30 miles (50 km) southeast from Srinagar, on the north of the PirPanjal Range. Anantnag is an agricultural trade centre and the southern headquarters for navigation of large boats in the Vale of Kashmir. Many springs flow from the land around the city, Anantnag claims the largest number of streams (Nallas) like Sandran, Brengi, Arpath and Lidder. The most important among these is Lidder which takes off from Sheshnaglake and irrigates the maximum area of the district. It is the third biggest city in Jammu and Kashmir after Srinagar and Jammu with a metropolitan agglomerate populace of 159,838 and civil cutoff populace of 109,433. In 2010 Anantnag was declared as a major City of Export with an absolute GDP of 3.7 billion $. The high GDP of Anantnag is because of the unified position and presence of a large number of troops and migrant workers in it. Anantnag has an essential position lying on the fundamental North-South Corridor Road and with the biggest number of tourist destinations, it is a monetary centre point of Kashmir Valley. (Adam Zeidan, Britannica)

Anantnag District is in the southern sector of Jhelum Valley. It is because of its rejuvenatingclimate, the inspiring majesty, its lofty mountains, the melodious flow of sweet waters of itssprings and streams, fertile soil, fragrant flowers and delicious fruits that the district has cometo be synonymous with greatness.

The main cluster for the adroitness of Gabba making in Anantnag district is Anchidora. In addition to this area, few families from Chatter Gul and Mattan of Anantnag District are also involved in this craft.

Producers/Cluster

Gabbasazi is considered to be a very old form of art in Kashmir. Scholars have identified a bronze figure of Buddha, dated to 6th century AD, shown seated on such a floor cover which, according to them, resembles a Kashmiri Gabba. There was a time when it was so August that every household embraced this art and had a small unit for Gabbasazi. Earlier this craft was not only practised in Anantnag but also in Poonch, Baramulla and Srinagar. In the book, The people and culture of Jammu, Kashmir and Ladakh, ParvezDewan, mentions that Gabbas are made at Anchidora, Chatter Gul, Mattan, Shangas and Qazigund areas of Anantnag District, Uri of Baramulla, and Makhrpora and Sazgaripora of Srinagar District. The Gabbas are sold at various shops of Anantnag, the Central Market, the KhadiBhandar and Polo view of Srinagar District.

The upcycled carpet was of paramount importance and was a cardinal part of the heritage. Today there are only a few families across the entire Valley of Kashmir who know the craft of Gabbasazi. Anchidora, Chatter Gul and Mattan in Anantnag district are the areas where the Gabbasazi is still done, Anchidora being the main cluster for this proficiency of Gabba.

The time taken in creating the Gabba depends upon the size of the carpet and the fineness of the embroidery.

Socio-Cultural and Economical Significance

The art of Gabba making is exclusive to Kashmir and is generally known as the common man's carpet, Gabbas are made of lois or blankets which are washed, stitched and dyed in various colours. There are two types of gabbas, embroidered and appliqued. Embroidery is bold and vivid in cotton or woollen yarn. In the appliqued type, pieces of dyed blanket are joined together and interspaced with embroidery, resulting in bright flashes of design against an ombre background. Gabbas are generally made in the sizes 4X7", 6 X 9[1] and 9 X 12" Square and round cushion covers are also made in the Gabba technique.

The origin of the appliqued or dal-guldarGabba is not known, but there are several interesting theories. One of them is that a refugee from Kabul, Abdul Rahman, prepared for his host, Kamal Butt of Retson village near Taral, a saddle piece in applique technique. This was found very interesting and the idea caught the imagination of the AnantnagGabba makers. Maharaja Ranbir Singh during Dogra Rule gave a fillip to the Gabba craft when he invited craftsmen to prepare shamianas, kanats and Gabbas for state use. The use of banat or broad cloth instead of old lois improved the value and appearance of special gabbaspatronised by the palace.

After so many years, Gabba making continues to form the livelihood of a significant percentage of the people of Kashmir even to this day. Gabba sells only locally, but the trade was once a booming business sector of the craft industry of Kashmir. The art of converting rags to riches with beautiful colours and designs represents the scenic beauty and imagination of Kashmiri artists. The upcycled rug provides livelihood to the Gabba makers, the dyeing houses and the embroidery workers, and wool sellers associated with it. The art of Gabba making has a deep-

rooted connection with locals of Kashmir as many households of Kashmir significantly used the craft. Earlier the craft of Gabba making had the whole family involved, each person with all the skill sets to create the marvellous piece of art.

H) Proof of Origin (Historical records):

Kashmir is noted for its beauties and bounties. It has been for centuries the object of attention for poets, painters, reformers, artisans, scholars and philosophers. The beauties of Kashmir have also been the cause of its outside intervention in the course of its history. During Muslim rule the people at large got attracted towards the handicrafts bought from other parts of the world. Because of the participation of people in new modules the economy of people and state underwent many great changes.The rule of Muslims in the valley was established by Shah Mir in,1339.A.D, commonly known as Sultan Shamsu'd-din Shah Mir.

The hindu rule declined because of a complex social structure. Majority of the people were out of the social system and were not having any access to the doors of administration. No doubt the valley was rich in resources but they were misutilized by the upper classes of society. The valley masons were known for their architectural excellence. The same is visible while having a look at the temples of the Karkota dynasty, the temples of Awantivarman and others. Among the Karkota rulers, the rule of Lalitaditya, 724-61,A.D, is noteworthy. His reign was really an epoch for the people.

Among the Sultanate rulers only two of them were very famous among the people without the consideration of religion. The one is Sultan Shihabu'd-din, 1389-1413.A.D,and Sultan Zain-ul-Abidin, 1420-1470.A.D. Shihabu'd-din was not only a great conqueror but also an able administrator. He was very kind to people belonging to other faiths and every sort of facility was provided to them. Number of measures were also taken to preserve their religious places and new temples were also constructed for the people. Sultan Zain-ul-Abidin was the most popular among all the Sultans of Kashmir. He took a series of measures for the betterment of his subjects and thus earned the great name of Budshah. The era of Sultan Zain-ul-Abidin is the golden period of industrial development in the valley. Large number of arts and crafts which were earlier introduced during the time of Sultan QutbUd-din, 1373-1389,A.D, by Mir Syed Ali Hamdaniwere boosted by Sultan ZainulAbidin. For the promotion of arts and crafts he used novel methods. He provided every sort of patronage to the foreign artists and craftsmen, due to which a large number of artists and craftsmen thronged into the valley. Above all significant progress was made in the fields such as, Shawl work, Embroidery, Silk, Carpet, Pattu, Gabba, Namdah, Paper and Book binding, Paper Mache, Wood work,Kangri work, Music, Silver and Copperware works. Before the introduction of these arts and crafts Kashmir was poor in the industrial sector.

The Gabba is a unique type of flooring used in Kashmir especially in winter season. It is prepared from old woollen blankets in different designs. The popular quality and types are, Dal-guldar with a circular star in the middle known as chand resembles the moon. The industry created a new class of tradesmen in the city known as Zachagarus. They used to move from area to area to collect the old blankets and sell them to Gabba manufacturers. As Srinagar was the centre of religious activities and it was easier for them to sell out their products at good prices. The work was mostly opted by the rural population. The famous and best quality of Gabba is manufactured in district Anantnag of valley.

Gabba is one kind of embroidery out of the waste products. Old pieces, waste wool, tattered shawls etc are collected, thrashed and dyed. These are then sewn onto the base with a chain

stitch rug. No definite pattern or design is followed for embroidery work. Gabba pieces look appealing in dark and ombre colours relieved by bright flashes. These find their uses as diwan spreads and bedding Anantnag, 36 miles from Srinagar, is the centre of this craft. This alone employs more than 1,000 craftsmen. Women are employed more in number than men.The price of carpets ranges from Rs. 4 to Rs. 20 per square yard. An embroidered rug, called Gabhd, is made in Kashmir. This is done by cutting out forms in woollen cloths of various colours, which are inserted and counter-changed like the opus consutum of mediaeval times, the edges and field being worked in a large embroidery stitch in suitable colours.

The Gabba is a unique type of floor covering which is prepared from old woollen blankets in a variety of forms and designs. According to legend, the origin of the Gabba art is attributed to a poor tailor named Lassa Tota living in Anantnag who stitched some worn out pieces of coloured 'pout' together to form a floor cloth. Its success laid the foundation of this industry.Another story traces the origin to a refugee from Kabul named AbdurRahman who prepared an embroidered saddle-piece for his host Kamal Bat of Ratson village near Tral, South eastofAwantipora.It was under the patronage of Maharaja Ranbir Singh however, that the Gabba industry received a fillip when he invited the experts Muhammad Bhat, Jamaal Bat, RasulMagre and NurShaikh, to Srinagar to prepare shamianas, qanats and gabbas for state use. In addition, the use of banat or broadcloth, instead of old lois, improved the value and appearance of the Gabba immensely. The work is mainly localised at Anantnag however printed gabbas are a speciality of Baramulla.The Gabbas are made in a variety of ways such as applique, embroidery, combination of both applique and embroidery and printing. The Dal-Guldar is a popular design with a circular star in the middle called the chand, the designsare inspired from natural scenery, animal and insect life and other crafts.

S.R. Bakshi in his book Valley and Its Culture explains about the allied industry, which is located almost entirely at Anantnag, and the only one outside Srinagar is that of making Gabbas. These are woollen fabrics made of pattoos to be used as floor-coverings, bedspreads and table-clothes. The background is of diverse colours and is covered in whole or in part by highly ingenious geometrical and other designs, either by means of embroidery or stitching. If lined with some suitable and durable jute material they last for years. In Europe worn out woollens are torn up into fibres, and re-spun and woven into "shoddy", but in Kashmir, they are used to make pattoo cloths and gabha floor-covers, or patchwork rugs.

Worn out loies (blankets) are the chief material from which pattoos and Gabbas are made. Loies which are in fairly sound condition are used for the manufacture of pattoos, but those that are only good in patches are utilised for Gabbas. The sound portions are cut out, milled and dyed, and are then cut to various patterns, and then fixed together, in various geometrical designs. They form most attractive multi-coloured rugs, and are eminently suitable for use in house-boats, tents, verandahs, and for general household purposes as they last, with proper use and care, for quite a long time. Gabha-making is confined to but one place in Kashmir, namely Anantnag (or Islamabad), though agencies for sale exist in several other towns. Being on the main road to Martand and to the sacred cave of Amarnath, thousands of visitors and pilgrims pass through Anantnag every year, and they are large purchasers of Gabbas which keep the business not only alive, but in a flourishing condition, while the labourers (employed mostly from the surrounding villages) thrive on its manufacture. Of late years the quality and appearance of these rugs have greatly improved, and their output is continually increasing DewanParvez in his book Jammu, Kashmir and Ladakh - Kashmir, explains that till the early part of the 20th century. Shawl weaving was the main industry in the town and employed almost half of its working population. Anantnag town was also famous for the fine saddles and rugs made there. It still is the capital of the Gabba industry.

A kind of a refined patchwork, is how an officer of the British Raj described the appliqué variety. The shreds are dyed in various colours mainly in bright primary colours. They are then joined together in a manner in which the seams are concealed, sometimes by embroidery. The patterns are mostly geometric. In the case of gabbas made of whole blankets, the blanket is first dyed and then embroidered with coloured woollen threads. These threads are of double-or triple-ply. This kind of work is known locally as "feetaykakaam". Such gabbas are mainly meant for local customers and normally are custom-made. Chain stitched rugs, too, are a variety of Gabba. The cloth used in chain stitched gabbas is totally different from that used in ordinary gabbas. The shape is almost always rectangular. The size rarely exceeds 9"x 12'. Sometimes gabbas are also used as curtains.

The fanciest gabbas use broad-cloth and barack blankets, instead of old blankets as their raw material. At other times the yarn used is staple, not wool. This makes gabbas look like carpets, and at a fraction of the cost. Normally a cotton lining is sewn onto the reverse of gabbas. Sometimes this lining is filled with wool to give the Gabba a soft, cushioned feel. No one knows for certain how gabbas originated. One theory is that an Afghan refugee called Abdul Rehman brought this craft to Kashmir when, in a village near Tral, he made a small, embroidered woollen rug to be placed on the saddle of the horse of his host, Kamal Butt. The type of embroidery that he had used was jalik-doozi.

According to the book written by ParvezDewan, In any case, Gabba started out as rugs for the poor man. As they grew in elegance, even the rich started buying them. Towards the last quant the 19 century they started being made in Baramulla and, by the 20thcentury, Srinagar

In my family we purchase sheets of 'dosooti' cloth that are slightly bigger than the 'Gabba'. This is a heavy cotton cloth, of which the yarn is 'double twisted'. The Handloom Development Corporation makes it in Kashmir. However, it is made in many other parts of India as well. It is sold at traditional textile shops everywhere in India. We give the 'Gabba' and the 'dosooti' to our neighbourhood tailor in Delhi, who sews the 'dosooti behind the Gabba. So when we place the Gabba on the floor (or drape it on a wall) it is the 'dosooti' that touches the floor or wall. This gives the Gabba weight and body and thus prevents the Gabba from crumbling on the floor. It also makes sure that its sides don't curve upward. The 'dosooti' lining also makes the 'Gabba' last longer.
The art would have died out but for the patronage of Ranbir Singh (1857 85). The Mahārājä invited to Srinagar the four best Gabba makers of Anantnag to make tents (shamianas) and floor coverings for the government The Dogra rulers were fond of this craft. It is said that once when Ranbir's father. MahârâjâGulab Singh (reign: 1846-57) was travelling through niral Kashmir he met an elderly man who offered him milk and fruit juice. The Maharaja was given a 'Gabba' to sit on. He was so impressed by the "Gabba'' that he asked for one.

REFERENCE

Andrabi, D.S.D.A., 2017. Industrial Development: Socio-Economic Changes in Kashmir Society (1339- 1551. A D.). American Research Journal of History and Culture (ARJHC), 3(1), pp.01-07. Large number of arts and crafts which were earlier introduced during the time of Sultan QutbUd-din, 1373-1389,A.D, by Mir Syed Ali Hamdani were boosted by Sultan ZainulAbidin. For the promotion of arts and crafts he used novel methods. He provided every sort of patronage to the foreign artists and craftsmen, due to which a large number of artists and craftsmen thronged into the valley. Above all significant progress was made in the fields such as, Shawl work, Embroidery, Silk, Carpet, Pattu, Gabba, Namdah, Paper and Book

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T. M. Abraham, Handicrafts In India, Graphics Colombia, New Delhi, 1964. Gabba is one kind of embroidery out of the waste products. Old pieces, waste wool, tattered shawls etc are collected, thrashed and dyed. These are then sewn onto the base with a chain stitch rug. No definite pattern or design is followed for embroidery work. Gabba pieces look appealing in dark and ombrecolours relieved by bright flashes. These find their uses as diwan spreads and bedding Anantnag, 36 miles from Srinagar, is the centre of this craft. This alone employs more than 1,000 craftsmen. Women are employed more in number than men

Mukharji, T.K., 1888. Art-Manufactures of India: Specially Compiled for the Glasgow International Exhibition 1888, Page 394 The price of carpets ranges from Rs. 4 to Rs. 20 per square yard. An embroidered rug, called Gabhd, is made in Kashmir. This is done by cutting out forms in woollen cloths of various colours, which are inserted and counter-changed like the opus consutum of mediaeval times, the edges and field being worked in a large embroidery stitch in suitable colours.

G. M. D Sufi, Kashir; Being a history of Kashmir From the earliest times to our own, Gulshan Books, Srinagar, 2015) Another story traces the origin to a refugee from Kabul named AbdurRahman who prepared an embroidered saddle-piece for his host Kamal Bat of Ratson village near Tral, South east of Awantipora.

G. M. D Sufi, Kashir; Being a history of Kashmir from the earliest times to our own, Gulshan Books, Srinagar, 2015 It was under the patronage of Maharaja Ranbir Singh however, that the Gabba industry received a fillip when he invited the experts Muhammad Bhat, Jamaal Bat, RasulMagre and NurShaikh, to Srinagar to prepare shamianas, qanats and gabbas for state use. In addition, the use of banat or broadcloth, instead of old lois, improved the value and appearance of the Gabba immensely. The work is mainly localised at Anantnag however printed gabbas are a speciality of Baramulla.

P. Pande, An Exploration of Kashmiri Naqash Communities; their Craft Practices and Cultural Heritage, Asian Conference on Cultural Studies Reclaiming the Future (ACCS2019), 24-26, 2019 The Gabbas are made in a variety of ways such as applique, embroidery, combination of both applique and embroidery and printing. The Dal-Guldar is a popular design with a circular star in the middle called the chand, the designs are inspired from natural scenery, animal and insect life and other crafts.

S. R. Bakshi, Kashmir: Valley And Its Culture, Sarup and Sons, New Delhi, 1997. S.R. Bakshi in his book Valley and Its Culture explains about the allied industry, which is located almost entirely at Anantnag, and the only one outside Srinagar is that of making Gabbas. These are woollen fabrics made of pattoos to be used as floor-coverings, bedspreads and table-

clothes. The background is of diverse colours and is covered in whole or in part by highly ingenious geometrical and other designs, either by means of embroidery or stitching. If lined with some suitable and durable jute material they last for years. In Europe worn out woollens are torn up into fibres, and re-spun and woven into “shoddy”, but in Kashmir, they are used to make pattoo cloths and gabha floor-covers, or patchwork rugs. Worn out loies (blankets) are the chief material from which pattoos and Gabbas are made. Loies which are in fairly sound condition are used for the manufacture of pattoos, but those that are only good in patches are utilised for Gabbas. The sound portions are cut out, milled and dyed, and are then cut to various patterns, and then fixed together, in various geometrical designs. They form most attractive multi-coloured rugs, and are eminently suitable for use in house-boats, tents, verandahs, and for general household purposes as they last, with proper use and care, for quite a long time. Gabha-making is confined to but one place in Kashmir, namely Anantnag (or Islamabad), though agencies for sale exist in several other towns. Being on the main road to Martand and to the sacred cave of Amarnath, thousands of visitors and pilgrims pass through Anantnag every year, and they are large purchasers of Gabbas which keep the business not only alive, but in a flourishing condition, while the labourers (employed mostly from the surrounding villages) thrive on its manufacture. Of late years the quality and appearance of these rugs have greatly improved, and their output is continually increasing.

DewanParvez, Jammu; Kashmir AndLadakh-Kashmir, Manas Publication, New Delhi, 2004 Till the early part of the 20th century. Shawl weaving was the main industry in the town and employed almost half of its working population. Anantnag town was also famous for the fine saddles and rugs made there. It still is the capital of the Gabba industry. A kind of a refined patchwork, is how an officer of the British Raj described the appliqué variety. The shreds are dyed in various colours mainly in bright primary colours. They are then joined together in a manner in which the seams are concealed, sometimes by embroidery. The patterns are mostly geometric. In the case of gabbas made of whole blankets, the blanket is first dyed and then embroidered with colouredwoollen threads. These threads are of doubleor triple-ply. This kind of work is known locally as “feetaykakaam”. Such gabbas are mainly meant for local customers and normally are custom-made. Chain stitched rugs, too, are a variety of Gabba. The cloth used in chain stitched gabbas is totally different from that used in ordinary gabbas. The shape is almost always rectangular. The size rarely exceeds 9”x 12’. Sometimes gabbas are also used as curtains. The fanciest gabbas use broad-cloth and barack blankets, instead of old blankets as their raw material. At other times the yarn used is staple, not wool. This makes gabbas look like carpets, and at a fraction of the cost. Normally a cotton lining is sewn onto the reverse of gabbas. Sometimes this lining is filled with wool to give the Gabba a soft, cushioned feel. No one knows for certain how gabbas originated. One theory is that an Afghan refugee called Abdul Rehman brought this craft to Kashmir when, in a village near Tral, he made a small, embroidered woollen rug to be placed on the saddle of the horse of his host, Kamal Butt. The type of embroidery that he had used was jalik-doozi.

DewanParvez, Jammu; Kashmir And Ladakh-Kashmir, Manas Publication, New Delhi, 2004 According to the book written by ParvezDewan, In any case, Gabba started out as rugs for the poor man. As they grew in elegance, even the rich started buying them. Towards the last quant the 19 century they started being made in Baramulla and, by the 20 century, Srinagar In my family we purchase she ets of ‘dosooti’ cloth that are slightly bigger than the ‘Gabba’. This is a heavy cotton cloth, of which the yarn is ‘double twisted’. The Handloom Development Corporation makes it in Kashmir. However, it is made in many other parts of India as well. It is sold at traditional textile shops everywhere in India. We give the ‘Gabba’ and the ‘dosooti’ to our neighbourhood tailor in Delhi, who sews the ‘dosooti behind the Gabba. So when we place the Gabba on the floor (or drape it on a wall) it is the ‘dosooti’ that touches the floor or wall. This

gives the Gabba weight and body and thus prevents the Gabba from crumbling on the floor. It also makes sure that its sides don't curve upward. The 'dosooti' lining also makes the 'Gabba' last longer .The art would have died out but for the patronage of Ranbir Singh (1857 85). The Mahārājä invited to Srinagar the four best Gabba makers of Anantnag to make tents (shamianas) and floor coverings for the government The Dogra rulers were fond of this craft. It is said that once when Ranbir's father. MahârâjâGulab Singh (reign: 1846-57) was travelling through niral Kashmir he met an elderly man who offered him milk and fruit juice. The Maharaja was given a 'Gabba' to sit on. He was so impressed by the "Gabba'' that he asked for one.

D. AAndrabi, Industrial Development: Socio-Economic Changes in Kashmir Society (1339-1551. A D.) American Research Journal of History and Culture (ARJHC), 1-07, 3(1) 2017 Traditional Gabba was made to suffice the need of good carpets for the people who could not afford expensive matting like Carpets and Namda. To cater to this section's requirements, Gabba making came into existence. The rug created was made from utilising old pheran patches or blankets given to the Gabba maker, who by his skill set would create a marvellous piece of art. Embroidery covered all the stitches, giving it a fresh look. This technique was affordable, provided warm matting and beautified the looks of households back then. Gabba is prepared from old woollen blankets in different designs. The industry created a new class of tradesmen known as Zachagarus. They moved from area to area to collect the old blankets and sell them to Gabba manufacturers. As Srinagar was the centre of religious activities, it was easier for them to sell their products at good prices. The work mainly was opted by the rural population. The famous and best quality of Gabba is manufactured in district Anantnag of the valley

Ahmad Iqbal, Masterpieces of Kashmir, Gulshan Books, Srinagar, 2012 The earlier types of appliqué designs have almost disap-peared, one such piece called Mughal type Gabba is also preserved in the textile gallery of the State Museum at Srinagar. The other types are common and prepared in several localities of Anantnag.

Traditional Gabba was made to suffice the need of good carpets for the people who could not afford expensive matting like Carpets and Namda. To cater to this section's requirements, Gabba making came into existence. The rug created was made from utilising old pheran patches or blankets given to the Gabba maker, who by his skill set would create a marvellous piece of art. Embroidery covered all the stitches, giving it a fresh look. This technique was affordable, provided warm matting and beautified the looks of households back then. Gabba is prepared from old woollen blankets in different designs. The industry created a new class of tradesmen known as Zachagarus. They moved from area to area to collect the old blankets and sell them to Gabba manufacturers. As Srinagar was the centre of religious activities, it was easier for them to sell their products at good prices. The work mainly was opted by the rural population. The famous and best quality of Gabba is manufactured in district Anantnag of the valley.(Andrabi, D.S.D.A., 2017.)

Over the years, when income flow increased, the requirement to create a rug from old rags decreased, and Gabba style embroidery on new blankets came into existence. Over time, motifs of designs also changed, and there was a shift from floral to animal figurine, and new inspirations came into style. Traditionally, woollen yarn is used in embroidery over Gabba, but the introduction of bright coloured nylon yarn slowly changed embroidery's colour schemes and look. Only a few artisans are presently associated with the traditional upcycledGabba making. Rest have shifted to modern Gabbas, mainly the adaptation of Gabba style embroidery on Chaddars and Blankets purchased directly from local markets.

The Gabba industry, unfortunately, is losing its earlier character. One of the arguments offered by the workers is that it takes too much time to make the traditional Gabba. Many of them have taken to crewel work, which is a better source of income. For new gabbas,

barrack blankets are increasingly being used as the lining as it is easier to work on them. It would be a pity for the colourfulGabba industry of Anantnag if its traditional designs, especially the one of Verinag Spring, The Applique type of Gabba is con-sidered a high quality Gabba. In this form the same coloured piece of woollen blanket is brought together and embroidered on joints, which give a fine design mostly of sun and moon. This type of Gabba is said to be the photo-types of Jamawar, where miniature needles were applied in bringing separately-embroidered pieces to-gether. The embroidered ones are very common while as printed Gabba are merely the imitations of embroidered ones available at very cheap rates. The earlier types of appliqué designs have almost disap-peared, one such piece called Mughal type Gabba is also preserved in the textile gallery of the State Museum at Srinagar. The other types are common and prepared in several localities of Anantnag.

Concentrated as the industry is in a rural area, the Gabba has a distinctly rural and folk flavour. Kashmiris use gabbas for picnics. as ordinary rugs, and also as colourful mattresses - properly lined, filled with cotton, quilted and piped to match the Gabba on the floor. They form most attractive multi-coloured rugs, and are eminently suitable for use in house-boats, tents, verandahs, and for general household purposes as they last, with proper use and care, for quite a long time. Gabba making is confined to only one place in Kashmir, namely Anantnag though agencies for sale exist in several other towns. Being on the main road to Martand and to the sacred cave of Amarnath, thousands of visitors and pilgrims pass through Anantnag every year, and they are large purchasers of Gabba which keep the business not only alive, but in a flourishing condition, while the labourers (employed mostly from the surrounding villages) thrive on its manufacture. In later years the quality and appearance of these rugs have greatly improved, and their output is continually increasing.

Despite inviting masters of the craft to Srinagar and planting of the trade in the city the art could not last for long in the city. The reason for it was that the Srinagar based craftsmen were already employed in Shawl looms. So the Gabbasazi could not gain the attention of urban artists. The work from here went to the villages where the village artists were producing woollen blankets, Chader. The Gabbasazi had easy access to the raw material in the villages which made it easy for them to practice this beautiful craft.

I) Method of Production:

Raw Materials

Base fabric: Old blankets, fabrics, waste wool, tattered shawls etc are collected, dyed and stitched together to create this product.

Glue: The paste made by mixing rice flour with water is used to adhere the different pieces of textiles together, which is further bastened by a thread.

Lining: Jute lining is used to give strength to the pieces joined together and is also used in hiding the unfinished seams on the wrong side of the fabric.

Dye: Dyeing is done using chemical dyes with alum added to hold the dyes. The rags are dyed black because it covers up all the stains and makes the colourful embroidery stand out. Dyeing

is done on a Mud stove called 'Daan', and Diluted sulphuric acid is added to enhance the colour.

Yarn: Two ply yarn composed of two single strands is used in the embroidery.

Tools

Aari: It is an embroidery hook used for creating various patterns and designs on fabric with thread. This needle has a hook at one end which is used for grabbing the thread from under the fabric and bringing it on the upper side of the fabric.

Prot(wool spinner) : It is used for sorting the yarn.

Mud chalk: It is used to make temporary markings on the fabric.

Collection of old rag

The essential step in the art of Gabba making is the collection of old Rags. Pheran (long tweed robe), the traditional dress of Kashmir, is one of the basic materials for the same. The front panel of Pheran is always prone to damages and is the most worn out part; however, the backside is comparatively less shabby out and is preferred for Gabba making. Another material is pieces of old Chaddars (blankets). The reason for selecting tweed and old blankets is that both materials are known for their warmth. The Gabba artisans collect these rags from people, and many times, the old rags and blankets are given by the customers only for making customised rugs. Washing the rags is the prime focus of the Gabba artisan and prepared for the next step, dyeing.

Dyeing

Rug

Dyeing applies dyes or pigments on textile materials such as fibres, yarns, and fabrics to achieve colour with the desired colour fastness. Dyeing is done using chemical dyes with alum added to hold the dyes. The rags are dyed in dark colours for even colouring. It is essential to dye the rugs in dark shades as it covers up all the stains and makes the colourful embroidery stand out. Traditionally dyeing is done on a Mud stove called 'Daan', and Diluted sulphuric acid is added to enhance the colour.

Yarn- Colours of Yarn

The dyeing woollen yarns are either done by the Gabba Artisans themselves or sent to the dyeing house in the local vicinity. Dyeing is not required for the nylon yarns as they are available in vibrant colours. However, woollen yarn is preferred as they have subtle shades and provide a better look to the final products. The two-ply yarn is dyed and left for drying before use. For dyeing, primary colours are mixed, and desired shades are achieved by adjusting the quantity of water. Wool and water are constantly stirred during the dyeing process to avoid patching. Diluted sulphuric acid enhances the colour as acid dyes are highly soluble in water compared with basic dyes. Acid dyes properly work on protein fibres such as wool. For perfect colouring, waiting for the boiling point of coloured water is essential as it induces the fibres to expand and colour adequately absorbed. Colours sourcing is done from local markets of Srinagar.

During winters the process of dyeing is assisted by a local fire pot known as Kangri. Which helps to get rid of any extra moisture. Different types of colours used are:

- Gulaeb- pink
- Bur zard-orange

- Nun zard-light orange
- Bulphoit-yellow
- Chouthgulaeb-Light pink
- Cheen-blue
- Anaer-red
- Angoor-green
- Malai-Turquoise
- Safed- white

Gluing of patches

After washing and dyeing, the rags and chaddars are cut into desired shapes and measured in 'Gaz'(36 inches), using a stick or inch tape. The pieces are glued together according to the requirement of the desired dimension of the final rug. A natural adhesive known as 'Maayir' is prepared by cooking rice flour and water, and a thick paste is made and left to cool down. Any damages that are visible are also repaired at this stage only. The borders are patched together and left to dry, and a thin jute lining is also glued to strengthen the final rug. This jute rug is called 'Taath' locally and is usually dyed in the same shade as Gabba. The Taath used is also a worn out piece that is to be upcycled. These layers are then folded and left to dry.

Stitching of Patches

After the final piece is adequately glued and dried, it is further strengthened by stitching the pieces together, called 'Koth'. Koth is done using black yarn and a needle called 'oonisia'. After sticking and patching, the final shape is properly finished by cutting extra fabric.

Tracing Of Basic Grid

This is one of the most interesting steps in Gabba making. Before the process of embroidery the basic layout of design is traced with basic household items. The basic layout consists of only rounds, squares and other basic shapes. Small bowls, tumblers, sticks and spoons are used for the layout. A basic grid is created and rest of the motifs are developed by the artisans while embroidering. For tracing locally sourced mud lumps are used.

Embroidery

The embroidery preparations begin with sorting wool, done on a local yarn spinner known as 'Prout'. Prout is a wooden spinner consisting of a base block with a wooden pillar in the centre with four directional wooden arms. These wood arms have the structure of yarn mesh that helps to golf the wool while spinning. The thread is placed on wood sticks and base yarn and turned to make mini yarn balls for embroidering. Embroidery helps to beauty the final rug and hides the stitch line and any patchwork on the rug. The embroidery consists of various design motifs, and each has a name to it.

The Gabbas are made in a variety of ways, such as applique, embroidery, a combination of both applique and embroidery. The Dal-Guldar is a popular design with a circular star in the middle called the chand. The designs are inspired by natural scenery, animal and insect lifeand other crafts.The Applique type of Gabba is con-sidered a high quality Gabba In this form the same coloured pieces of woollen blanket are brought together and embroidered on joints, which give a fine design mostly of sun and moon. This type of Gabba is said to be the photo-types of Jamawar, where miniature nee-dles were applied in bringing separately embroidered pieces together. The embroidered ones are very common while as printed Gabba are merely the imitations of embroidered ones available at very cheap rates.

Types of Embroidery

- Raekh- Border
- Tarakdaar
- Sitaardaar
- Ath burg
- Tsuwather
- Khiyaaw
- Tiyouk
- Silim
- Angraezisilim
- Guldaar
- Chinar- BouniPather
- Posh
- Yaadipather
- Gulidowud
- Badamdaar
- Chaand
- Verinag
- Tsountpoush
- Teer
- Khatai
- Gulab
- Hush phol
- Aadiwaldaar

Final Product

Final product of the whole process is an upcycled common man's carpet, Gabba. This artefact is crafted by stitching old woollen pieces of textiles together. S. R. Bakshi in his book KashmirValley and its culture, mentions that worn out loies are the chief material from which Gabbas are made. Textiles which are good in patches are utilised for Gabbas. The sound portions are cut out, milled and dyed, and are then cut to various patterns, and then pieced together, in various geometrical designs. The main cluster of the craft is Anchidora, Anantnag. It is made in different sizes based on the size of the room. The size rarely exceeds 9x12. There are three kinds of Gabba made in Kashmir. The first one is dal guldar, it is a Gabba of an applique style. At the centre of this type is a star, called the tarakdar, the second type is embroidered gabbas, in this type chain stitch embroidery is used. Third type is the combination of applique and embroidery. In the book The people and culture of Jammu, Kashmir and Ladakh, ParvezDewan, endorsed that the motifs are drawn from animal and plant life or nature. An officer of the British Raj described the applique Gabba as a refined kind of patchwork.

Designs & Description of Quality

The designs of Gabba depend upon the size and the type of inspiration for the embroidery, each piece is adorned with a different embroidery pattern. The contrasting colours of embroidery threads, with a black base create pieces that are one of a kind and are loved by the locals of J&K and also people from other states or UTs. Gabba craft underwent a lot of design intervention which resulted in new colour combinations that are vibrant, also new contemporary motifs for embroidery have been introduced by the artisans. Many artisans love to experiment with the style of inspiration according to their own discretion or customer demand. There are no quality parameters for Gabba, as the craft is upcycled and the quality wholly depends on the type of yarn used for embroidery and the design intricacy. The single piece Gabba that are made from a single piece of blanket without stitching different patches together have different types of quality grades.As the durability depends upon the quality of Blanket or Chadar used. The new single piece blanket Gabba is also adorned with beautiful patterns and colour combinations. The life of a Gabba is more than ten years and has a scope of repair. Prices of Gabba depend upon the size of the product and the neatness in designs. Prices vary with the intricacy, fineness of embroidery and quality of yarn and base fabric also plays an important role in the pricing of Gabba.

J) Uniqueness:

The Gabba is a distinctive and culturally significant craft from Kashmir, blending sustainability, intricate craftsmanship, and deep-rooted tradition. Its uniqueness can be understood through several key characteristics:

Use of Upcycled Materials:
The Gabba is created by upcycling old woolen blankets and tweed fabrics—locally known as pout—which are stitched together to form a rug. This practice is not only environmentally friendly but also highlights the resourcefulness of Kashmiri artisans. By repurposing old textiles, the Gabba serves as a sustainable solution to waste, giving new life to discarded materials. In today's world, where eco-conscious products are gaining prominence, the Gabba stands out as a perfect example of how traditional craftsmanship can contribute to sustainability.

Handcrafted Embroidery and Applique:
The Gabba features intricate hand embroidery, primarily done using a two-ply woolen yarn and Aari (tambour needle). The embroidery technique most commonly used is chain stitch, which creates bold, colorful patterns. Additionally, applique work is employed, where pieces of fabric are sewn onto the base, often forming floral and geometric designs. This combination of embroidery and applique gives the Gabba its textural depth and visual richness, making it a unique art form within Kashmiri textiles.

Nature-Inspired Designs:
The designs on Gabba rugs are deeply rooted in the natural beauty of Kashmir. Floral motifs, geometric patterns, and designs inspired by animal and insect life reflect the region's biodiversity. One of the most iconic designs is the Dal-Guldar, featuring a central star (chand), symbolizing the Kashmiri connection to their land. This deep connection to nature not only enhances the aesthetic appeal of the Gabba but also adds to its cultural significance.

Variety of Forms:
Gabba rugs are made in various shapes and sizes, allowing for versatility in their use. While the most common layout includes a central medallion within a rectangular field, the craft has evolved to produce floor mats, cushion covers, and furnishing fabrics. This flexibility in design enables the Gabba to stay relevant in contemporary interiors while preserving its traditional charm. Each Gabba is a reflection of personal artistry, making every piece unique.

Cultural Heritage:
The Gabba is not only a functional item but also a reflection of Kashmiri cultural heritage. Used traditionally as winter matting, it has been a staple in Kashmiri households for generations. The warmth and hospitality of the region are embodied in the Gabba, which has long been associated with the harsh winters of Kashmir. By using local materials and techniques, the Gabba serves as a symbol of Kashmiri craftsmanship, passed down through generations, making it an essential part of the region's cultural identity.

Warmth and Comfort:
The primary function of the Gabba is to provide warmth and comfort in the harsh Kashmiri winters. Made from woolen and tweed fabrics, the Gabba offers excellent insulation, making it a highly practical floor covering for cold climates. Its thick, soft construction provides both aesthetic appeal and functional value, creating a cozy atmosphere in any home.

Local Craftsmanship and Community:
The production of Gabba is a community-driven effort, especially concentrated in the Anantnag region of Kashmir. The craft has been passed down through generations, ensuring that local artisans continue to perfect their techniques. Specialized training centers in the region, especially for women, help preserve this traditional art form and offer economic opportunities for

communities. The craftsmanship involved makes each Gabba unique, with personal touches that reflect the skill and dedication of the artisan.

Preservation of Traditional Craft:
Despite the decline in the use of Gabba as floor covering, its traditional techniques—like applique, chain stitch embroidery, and handcrafting—are still preserved. The introduction of modern designs and new product lines such as cushion covers and furnishing fabrics has helped the craft evolve with changing times, ensuring its continuation and relevance in the present day.

Market Potential and Revival:
While the popularity of Gabba as a traditional floor mat has decreased due to the availability of modern alternatives, its eco-friendly, upcycled nature makes it an attractive product in contemporary markets focused on sustainability. Gabba's unique qualities position it well for growth in markets increasingly focused on sustainable, handmade goods. The growing demand for upcycled products and craft tourism in Kashmir also holds the potential for a resurgence in demand for Gabba, both locally and globally.

The Gabba is a distinctive fusion of sustainability, intricate handwork, and cultural heritage. Its eco-friendly nature, handmade craftsmanship, and nature-inspired designs make it a unique symbol of Kashmiri artistry. Despite modern challenges, the craft's preservation, adaptability, and growing demand for sustainable products make the Gabba an important cultural artifact with great potential for the future.

K) Inspection Body:

The proposed structure of inspection and implementation of the GI:

- One representative from Development Commissioner Handicrafts, Ministry of Textile,Government of India
- One representative from Directorate of Handicrafts and Handloom, Kashmir
- One representative from Office of the Development Commissioner (Handicrafts), Anantnag
- One representative from Craft Development Institute, Srinagar
- One representative from Indian Institute of Carpet Technology (IICT)
- One representative from "The Wirasat Handicrafts Industrial Cooperative Ltd."

L) Others:

"FOR GABBA"

जम्मू और कश्मीर
JAMMU & KASHMIR

STATE MAP
Scale 1:5,00,000

भारतीय सर्वेक्षण विभाग | SURVEY OF INDIA

- ANANTNAG
- SRINAGAR.

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 903
Application Date: 01-06-2022

Application is made by The KBA Handicrafts Industrial Cooperative at Halmulla, Anantnag, Kashmir, Jammu and Kashmir, India for Registration in Part - A of the Register of **Kashmir Willow Bat** under Application No. 903 in respect of Cricket Bat falling in Class – 28 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The KBA Handicrafts Industrial Cooperative

B) Address : The KBA Handicrafts Industrial Cooperative,
C Halmulla, Anantnag, Kashmir,
Jammu and Kashmir, India

C) Name of the Geographical Indication :

KASHMIR WILLOW BAT

D) Types of Goods : **Class 28**– Cricket Bat

E) Specification:

The Kashmir Willow Bat is a specialized piece of wood used by batsmen to strike the ball in cricket. It is crafted from Salix alba var. Caerulea cv. Culva, commonly known as Kashmir Willow, Vir, or Cricket Bat Willow. This particular willow species is renowned for its resilience and toughness, making it ideal for cricket bat manufacturing. The key characteristics of the Kashmir Willow Bat are as follows:

Species and Origin:
The wood used for these bats is sourced from the Salix alba var. Caerulea cv. Culva species, which is well-suited for bat production due to its toughness and resilience.
Kashmir Willow is grown in the Kashmir region, where the climatic and soil conditions provide an ideal environment for its growth. The species thrives near water bodies and is found in abundance in places like Baramulla, Anantnag, and Bandipora.

Impact and Playability:
Softened Impact: Kashmir Willow provides a softer impact on the ball compared to other types of wood, such as English Willow, making it suitable for controlled stroke play.
The softer nature of the wood allows for better ball control, which is particularly valuable for batsmen who focus on technique and precise shot placement.

While it does not offer the same level of power as English Willow, it provides an excellent balance of control and feel for the batsman.

Workability:
Ease of Crafting: The Kashmir Willow wood is relatively easy to work with, allowing batmakers to carve, glue, and sand the wood with precision. This quality makes it ideal for creating cricket bats with intricate shaping and design.
The wood is also flexible, allowing for customization in terms of handle shape, blade profile, and sweet spot placement.

Bat Structure:
A Kashmir Willow bat typically consists of two main parts: the handle and the blade.
Handle: Usually made from a stronger wood (often cane), the handle is designed to provide the batsman with better control and shock absorption during impact.
Blade: The blade of the bat is carved from Kashmir Willow, and its profile can vary based on the type of shots the player prefers to play.

Dimensions:
The standard dimensions for a Kashmir Willow bat are as follows:
Length: 33.5 inches (85.09 cm), making it an ideal size for the majority of adult players.
Width: 4.25 inches (10.8 cm), which is the typical width for a bat, ensuring a large sweet spot for optimal performance.

Geographical Influence:
The geographic location of Kashmir plays an important role in the growth of this species. The region's temperate climate, with its cold winters and mild summers, contributes to the development of dense, durable timber suitable for making cricket bats.
The proximity to water bodies helps the willow trees grow stronger and produce high-quality wood.

The Kashmir Willow Bat is known for its resilience, ease of craftsmanship, and its unique combination of control, comfort, and durability makes it a popular choice for many cricket enthusiasts.

F) Description:

Kashmir willow bat is famous worldwide for its strength, durability and affordability. It is made from Salix Alba var. Caerulea. cv. culva. locally known as Vir, Kashmiri willow or Cricket bat willow. The Kashmir bat industry is Asia's largest bat industry.

The Kashmir willow bat is a specialised piece of willow wood used by sports persons in the game of cricket to hit the ball. Typically it consists of a cane handle attached to a flat-fronted willow-wood blade. The length of the Kashmir Willow Bat is 33.5 inches (85.09 cm), and the width is 4.25 inches (10.8 cm). A cricket bat blade is a wooden block generally flat on the striking face and has a ridge on the backside that concentrates wood in the middle where the ball hits. Bat is traditionally made from Kashmir willow wood.

The raw material required for construction of a cricket bat is commonly known as willow and scientifically as Salix Alba. Willow is mainly cultivated in Kashmir and some parts of England. The climatic conditions of Kashmir are favorable for the cultivation of willow. The willow (Salix alba var. caerulea) used in making these bats was brought to Kashmir in the 19th century by

the British. Initially the material was planted at Kitreteng and Shalbagh. The adaptation of this species in the agro climatological niche of Kashmir resulted in further extension of its cultivation. The Willow logs are sourced locally and brought to the factories of Bijbehara Anantnag, where the clefts are obtained from logs of willow wood. The bat is then shaped, pressed and handles are fitted before the final finishing.

Kashmir Willow Bat Industry is Asia's largest bat industry and is an economically viable livelihood industry. Cricket bat is a discrete piece of wood used for striking a ball in cricket. The bat consists of two parts, a handle and a blade. The length of the Kashmir Willow Bat is 33.5 inches (85.09 cm), and the width is 4.25 inches (10.8 cm). The cricket bat manufactured in Kashmir is generally made of soft and fibrous wood namely Salix Alba, locally known as Vir or Kashmir willow. The wood has the characteristics of being hard wearing, relatively light, and easy to sand and carve into shape. The quality of willow is improved by drying and pressing it during its production stage. This wood is eminently hard and endures wallops or dents even after being hit by the leather ball. Kashmir Willow Bat is famous for its permanence, strength and affordability. A Kashmir Willow Bat is ideal for beginners, because of its affordable price range and durability. The bats made from willow wood are not only popular in India, but also in Pakistan, Bangladesh, Sri Lanka and have marked their place in International Cricket.

Raw Material

The Raw material used for Kashmir Willow Bat is Salix Alba also known as Kashmir Willow, Vir or Cricket bat willow. The specie is found in various parts of Kashmir like Baramulla, Anantnag and Bandipora. The climatic and soil conditions of Kashmir are suitable for the growth of Salix Alba. The species is often found near water bodies. The willow trees that are used for making these bats have been a part of this landscape for millennia, but it was only in the 19th century that the first chief of the Forest Department in J&K, J.C. Mac Donell and Walter R Lawrence began encouraging the willow tree plantations in Kashmir.(Kalpana Sunder)10Willow wood is used to produce cricket bats due to its high stiffness and low density. Historically, cricket bat material was experimented with, but from the 1890s onward, the sapwood of Salix Alba, a light coloured willow, have been used, as it provides much lighter and more aesthetically pleasing bats (Ben tinkler. Micheal Ramage)11. The Kashmir Willow Bat's manufacturing process starts with sourcing willow wood from the forests surrounding Anantnag, from trees that are about 12-15 years old and have a girth of more than 34 inches. The more rings on the trunk, the older and stronger the tree is.

The vir, or willow, grows in every village of Kashmir where there is water or moisture, and its reproduction is very simple. (Moby Sara Zachariah)12 This wood is hard and withstands bumps or dent even after being hit by the ball, yet it is lightweight. Quality of the bat is higher if the grains are straighter and when there are less blemishes on the bat. Willow has been used for nearly 200 years as the main raw material in the blades of cricket bats.

Cricket bat materials are regulated by the Marylebone Cricket Club (MCC), the governing body of cricket. The Rules of Cricket, Law 5.3.2 states 'The blade shall consist solely of wood'. Good quality willow takes many years to grow, high quality bats have 6–12 latewood rings. It takes 12-15 years for willow trees to mature completely. (Ben tinkler. Micheal Ramage)

The blade of the cricket bat should be made from a stiff material with the handle of the bat having a lower Modulus of Elasticity (MoE). This will allow the highest energy transfer from the bat to the ball during impact, allowing the ball to travel further.

About Salix Alba

Rapid-growing, spreading tree, to 25 m high, with grey-pink to brown shoots, pubescent when young, with somewhat-ascending branches. Leaves lanceolate, to 10 cm long, saw- toothed, acuminate, dull-green, silky-hairy, blue-green beneath. Catkins appear with the leaves; staminate ones yellow, to 5 cm long, on leafy stalks and pistillate. Catkins yellow-green, stalkless, to 3 cm long.

Flowering Mar-April
Native range: Europe, N. Africa, C. Asia.
Common name(s): White Willow.
Landscape use: Recommended for areas with moist soils along streams, ponds or in low spots in the landscape.(Abdul QudusJhon,Gulam Hassan Dar, Shabana Aslam, 2013)

Strategies for Obtaining Quality Raw Material- Skuast
According to a Document published by SKUAST (Sher-e-Kashmir University of Agriculture, Science and Technology) for producing defect-free raw material by planting poles, locally known as ‘‘mawas,’’ is the traditional method of raising cricket bat willow in Kashmir. These poles/mawas (usually 3m long cuttings with an approximate diameter of 30mm at the top end and 55mm across the base) are planted directly on the plantation sites. In order to ensure 100 percent rooting and survival it is always better to soak the basal portion of ‘mawas’ in water for 8 to 12 days before planting them at a depth of about 80 cm. After planting, the growers should tend the trees carefully if they are to sell their timber to cricket bat makers. The most important tending operation right from the early stages of growth is the removal of small epicormic shoots on the stem. If allowed to grow, these shoots form pin-sized knots in the wood, which weaken it and hence reduce its value. Maintenance is the most labour intensive for the first 5 years of growth, after which the bark will harden up and the side shoots become less evident.

G) Geographical area of Production and Map as shown in page no:

Anantnag, is situated around 30 miles (50 km) southeast from Srinagar, on the north of the PirPanjal Range. Anantnag is an agricultural trade centre and the southern headquarters for navigation of large boats in the Vale of Kashmir. Many springs flow from the land around the city, Anantnag claims the largest number of streams (Nallas) like Sandran, Brengi, Arpath and Lidder. The most important among these is Lidder which takes off from Sheshnag lake and irrigates the maximum area of the district. It is the third biggest city in Jammu and Kashmir after Srinagar and Jammu with a metropolitan agglomerate populace of 159,838 and civil cutoff populace of 109,433. In 2010 Anantnag was declared as a major City of Export with an absolute GDP of 3.7 billion $. The high GDP of Anantnag is because of the unified position and presence of a large number of troops and migrant workers in it. Anantnag has an essential position lying on the fundamental North-South Corridor Road and with the biggest number of tourist destinations, it is a monetary centre point of Kashmir Valley. (Adam Zeidan, Britannica)

Geographical Area of Production

Anantnag District is in the southern sector of Jhelum Valley. It is because of its rejuvenating climate, the inspiring majesty, its lofty mountains, the melodious flow of sweet waters of its springs and streams, fertile soil, fragrant flowers and delicious fruits that the district has come to be synonymous with greatness.(District Anantnag)17 The district consists of 395 revenue villages (386 = inhabited; 09= un-inhabited) with one Municipal Council and 09 Municipal Committees. There are 12 tehsils, viz, Anantnag, Anantnag East, Bijbehara, Dooru, Kokernag, Larnoo, Pahalgam, Qazigund, Sallar, Shahabad Bala, Shangus and Srigufwara which have further been sub-divided into 34 Nayabats (Land Revenue Circles) and 99 PatwarHalqas. For the development of the rural areas the district has been divided into 16 CD Blocks viz; Achabal,

Anantnag, Bijbehara, Breng, Chittergul, Dachnipora, Hiller Shahabad, Khovripora, Larnoo, Pahalgam, Qazigund, Sagam, Shahabad, Shangus, Verinag and Vessu.18(District Economic Review- 2019-20)

The main locale for the product Kashmir willow bat in Anantnag district is Halmullah, Sangam, Sether, Pujteng, Bijbehara, Panchpora and Mirzapora.

Salix alba is a species of temperate climate. It grows near water on the banks of rivers and lakes or by streams, wet hollows and ditches. It tolerates a wide variety of soil types but the roots need access to water.

Pulwama, located in the southeastern part of the Kashmir Valley, is renowned for its fertile plains, lush green fields, and mild, rejuvenating climate. The district is bordered by Anantnag to the south, Kashmir's famous saffron fields to the east, and the majestic Pir Panjal mountain range to the west. The combination of fertile soil, abundant freshwater sources, and a favorable climate has made Pulwama an essential region for agriculture and horticulture, with particular prominence in Kashmir Willow bat production.

Pulwama's beauty lies in its diverse landscapes, from the mellow hills to the riverbanks of the Jhelum River. The district enjoys a temperate climate with moderate rainfall, ensuring optimal growing conditions for Salix alba (Kashmir Willow). The abundant water resources, combined with fertile soils and suitable temperatures, have made Pulwama an ideal location for the cultivation of high-quality Kashmir Willow, which is crucial for the production of cricket bats.
The Kashmir Willow Bat production in Pulwama is centered around several key areas, where the wood is sourced and crafted into premium bats. Some of the major areas in Pulwama where Kashmir Willow Bat production thrives include Srinagar, Pulwama town, Pampore, Khrew, and the villages along the banks of the Jhelum River.

Geographical Features of Pulwama
Pulwama is known for its fertile land, particularly the Pampore belt, which is renowned for its saffron fields. The district is also known for its mountainous terrain, valleys, and flowing rivers, all of which contribute to its rich ecosystem. Pulwama, like other districts in the Kashmir Valley, enjoys a moderate climate that makes it ideal for willow cultivation.

- Climate: Pulwama has a temperate climate that is conducive to the growth of Salix alba (Kashmir Willow). The district receives moderate rainfall and experiences cold winters and pleasant summers, providing optimal growing conditions for the willow species.
- Water Sources: The Jhelum River and its tributaries flow through the district, providing ample water resources that are essential for the growth of Kashmir Willow. These waterways are a key feature of the Kashmir Willow Bat production process, as the willow species thrives in wetlands and near rivers.
- Soil Conditions: The district has fertile soils rich in organic matter, ideal for willow trees, which require waterlogged soil for optimal growth. The specific soil conditions found along the riverbanks and wet ditches contribute to the high quality of Kashmir Willow used in bat production.

Kashmir Willow Bat Production in Pulwama
Like Anantnag, Pulwama also plays a critical role in the production of Kashmir Willow bats. The district is home to several artisan communities that engage in the crafting and shaping of Kashmir Willow bats. The production areas include Khrew, Pampore, Pulwama town, and the villages along the banks of the Jhelum River.

Key Production Locations:

- Khrew: A notable region in Pulwama, known for its natural willow trees. Khrew is one of the primary locations for the growth of Kashmir Willow, with a long-standing tradition of bat production.
- Pampore: Famous for its saffron fields, Pampore is also home to a growing community of bat producers, who harvest Kashmir Willow and craft it into premium-quality cricket bats.
- Pulwama Town: The town serves as a hub for the craftsmanship of Kashmir Willow bats, with several artisan families engaged in the trade for generations.
- Villages near Jhelum River: The areas along the Jhelum River, such as Srinagar and Pampore, offer ideal conditions for growing the willow species used in bat production, benefiting from the abundant water sources.

Kashmir Willow (Salix alba) in Pulwama

Salix alba is a species of temperate climate, which thrives in the fertile, water-rich areas of the Kashmir Valley. In Pulwama, Salix alba is cultivated along the riverbanks, particularly near water bodies, and in wet hollows where the roots can remain hydrated.

- Habitat: The willow trees in Pulwama grow near streams, rivers, and lakes particularly along the banks of the Jhelum River and its tributaries. These locations provide the necessary moisture and soil conditions required for optimal willow growth.
- Growth Conditions: Kashmir Willow tolerates a wide range of soil types, but it thrives in fertile soils with access to freshwater. The fertility of Pulwama's soil combined with its abundant water supply makes it an ideal region for growing willow trees that are used in bat production.
- Water Needs: Salix alba requires access to water during its growing phase, which is why Pulwama’s proximity to the Jhelum River and its tributaries is crucial for the growth of this species. The soil near these water sources offers an ideal growing environment for Kashmir Willow.

Producers/Cluster

The manufacturing units for the construction of Willow bats are located in various districts of Kashmir but the largest cluster for bat manufacturing is Anantnag district. The workers in the bat industry are tremendously skilled. The main areas where the manufacturing units are located are Halmullah, Apart from Anantnag, few bat manufacturing units are also located in Srinagar, Budgam, and Baramulla district of Kashmir. The cricket bat industry has an impressive reputation of making bats which are exported to other states of India.

Imtiyaz ul Haq, in his research paper, mentioned that, in Kashmir the hub of this activity is District Anantnag, where about 147 units are registered with the District Industries Centre (DIC). The Faculty of Forestry, in its research paper, broaches that there are about 195 functional bat manufacturing units in Kashmir valley with the majority of them (147) spread on or around the Jammu–Srinagar National highway.

Existing Bodies of Producers

Asia’s largest bat industry, Kashmir Willow bat industry is a staunch provider of livelihood. The industry, with around 147 small and big manufacturing units, provides direct and indirect employment to nearly 15,000 people in the Valley. The main cluster for the manufacturing of willow bat is the Anantnag district of Kashmir. This trade flourished in those areas of Kashmir where raw material was substantially available.

Socio-Cultural and Economical Significance

The adroitness of bat making is done majorly in Anantnag district by unrivalled skillful workers. The wood used for manufacturing bats is from Salix Alba, Kashmiri willow or Vir, which is grown mainly near water bodies. This industry provides livelihood to a large number of people. They provide employment to skilled, semiskilled and unskilled people (helper and watchman).

The research paper namely "Cricket Bat Industry as an Economically Viable Livelihood Option in Kashmir '' issued by the Faculty of forestry, SKUAST mentions that the industry is supporting the livelihood of around 50,000 people who are directly or indirectly benefiting from this trade. With plans on expanding the production of cricket bats in the future, the potential of this industry for employment is expected to increase. The various activities involved will require all classes of manpower, viz., skilled,semiskilled, and unskilled, for value addition and final processing. Thus, this industry has been contributing to the employment generation in Kashmir.21

The bat industry of Kashmir has a potential to manufacture more bats than they usually do.

Kashmir Willow Bat industry would grow, and erect a colossal position in an international market which could ameliorate the economy of Kashmir.

The Faculty of forestry, SKUAST in their research paper mentions that the bat industry has a production potential of 1.5 million bats with an annual turnover of 20 million rupees (Rs) per annum. The bats made in Kashmir are not only popular in India, but also in Pakistan, Bangladesh, and Sri Lanka.Further, with projected demand of cricket bats expected to increase to 4 million per annum in the global market.

H) Proof of Origin (Historical records):

Historical References in Books
Our Summer in the Vale of KashmirF Ward Denys 1915

Sports naturally fill a very important place in a community that is in a sense very largely of a vacation character, for during the season the majority of the temporary residents are there simply for their vacations. They consist largely of civil and military officials with their wives and families, pretty nearly all of whom are not only accustomed to the various forms of sport, but as a rule are extremely fond of them. Among these, as already intimated in other chapters, tennis, golf, polo, cricket, badminton, croquet, sailing and riding fill an important place.

Cricket- The mere fact that the Maharaja is a cricketer gives a zest to this sport that it otherwise would not possess, at least among the natives. It is, however, a very popular one among the officers and residents, and some of the teams make a most creditable showing. Naturally the largest attendance is drawn together when it is known the Maharaja himself is going to take part. This attendance is composed largely of ladies, and it would be hard to conceive a more charming picture than these attractive English women present in their dainty afternoon costumes.

Another event of special interest was the cricket match, in which the Maharaja himself took part. He is a keen lover of sport of all kinds, excepting sport that means the taking of life, in which he never indulges. His love of cricket, for in- stance, is so great that, in spite of his years, he never fails to take part in a certain number of matches, and he is as keen as the youngest member present in the matter of making as large a score as possible. Nor is this interest discouraged by his British friends, who see to it that his score is always a satis- factory one to himself. Of

course he does not attempt to run — that is done by another for him — but he does bat and some- times surprisingly well. Naturally when he makes a particularly good hit the native enthusiasm is almost wild in its demonstration of delight, but it is well sustained by all the members of the British community who are present. At this and all similar occasions there is a tent, or oftentimes three or four tents, where refreshments of all sorts are served on a very liberal scale. Nothing is stunted as to quantity or quality, and the very best that can be had is invariably provided, even in the matter of liquors and cigars.

General Historical Development Of The Product Over Time

When the Britishers brought the game of cricket with them, there was a need to manufacture the bats locally, instead of depending on import of bats from England. The willow (Salix alba var. caerulea) used in making these bats was brought to Kashmir in the 19th century by the British after being recommended by Sir Walter R. Lawrence and J.C. Mac Donell, the first chief of the Forest Department in J&K. The weather conditions in Kashmir was similar to that of Europe and was best suited to cultivate willow. Bat making however comes with a set of guidelines set by ICC which are to be followed while designing a bat. To prevent any added advantages or unfair play due to different bat sizes, the International Cricket Council formulated several laws regarding the bat. Over the years there have been many changes in the design or guidelines for bat making which were also adapted by the local bat factory owners. The design of the handle has also changed over the years. Until the mid-nineteenth century, the early cricket bats were made all of one single piece of material i.e. wood but this often led to bats shattering and breaking when hitting by balls at extreme pace and a shock transferred to the hand. A development that made this much less likely was the addition of a separate handle which led down to a tapered splice, which fitted into the blade of the bat. This made bats much stronger than earlier and thereafter the modern cricket bats have been made of two parts i.e. the blade and the handle. The first use of cane wood for the handle and the method of manufacture from multiple pieces in 1853 have remained largely unchanged. A new kind of material that was introduced and fitted together during manufacturing and solid wooden handles have been replaced by lighter cane handles interlaced with strips of rubber (typically 2-4 strips of rubber), and these handles became intricate construction and were nearly all made of cane with Indian rubber grip for damping and resilience to breaking which aim to reduce the transmission of shock and vibration from the blade of the bat to the players hand and vibration damping material. Over the years technique of scooping to reduce the bat weight has also been explored by batmakers. There were no regulations on cricket bats, up until the mid-nineteenth century so players used many different types of wood bats from long, heavy, round ones to short, flat bats that were similar to baseball bat and hockey sticks, but today bat geometry is tightly regulated in all levels of play. (Ashish Kumar Katiyar)

The Kashmir Willow bat has finally got approval from ICC and International players. The global distinction has fueled the local factories and shifted the game in Kashmir's favour.

Fauzul Kabeer, the owner of Great Sports (Bat making unit), in an interview, explained that his company approached many international firms to promote Kashmir Willow Bat. As a result, the company made some sample bats according to international guidelines of bat making. The company also approached the Oman cricket team and manufactured bats according to the team's needs. The Oman cricket team used the bats in practice matches and training sessions and liked the Kashmir Willow Bat performance. Thus the Kashmiri Willow bat entered International Cricket. The owner believes the female variant is as good as English willow and makes acceptable bats.

Kashmir Willow Bat also marked its place in tournaments like ICC T20 and Legends Cricket League. International Cricket players like Misbah-ul-Haq, Mohammad Yousuf, Munaf Patel, Wasim Jaffer have played with Kashmir Willow Bat in International cricket matches.

Bangladesh, Bahrain, Kuwait and New Zealand are more international customers for Kashmir Willow Bat.

I) Method of Production:

Raw Materials: **Wood**

Kashmir willow (Salix Alba)

The main raw material used for the manufacturing of Kashmir Willow Bat is Salix alba var. caerulea is also called cricket bat willow, Vir and Kashmiri willow. The clefts from these timbers produce bats, which vary greatly in quality and performance. This willow best suits playing requirements because it is resilient and tough. This willow provides a softened impact on the ball and allows the quality of genuine stroke play. Kashmiri willow trees are harvested after 12-15 years or when they attain a girth of 120cm at 1.5m above ground and stand 12m tall. This species is found in many parts of Kashmir like Baramulla, Anantnag and Bandipora. The willows belong to the genus Salix (Salicaceae) is one of the most important taxonomic entities in the world because of the great number of species and varieties. There are about 330-500 species world wide occurring mostly in the arctic region and north-temperate zone, but few species in the southern hemisphere covering tropical and subtropical zones. In India, there are about 33 species of Salix that are reported from temperate regions. Few introduced species have been sporadically cultivated in the foothills and inner valleys of Himachal Pradesh, Jammu and Kashmir, Uttarakhand and the Northeastern regions of India for many years.Among them, the most popular is cricket bat willow Salix alba var. Caerulea cv. culva. is a female cultivar of hybrid origin between S. alba and S. fragilis, which was introduced by the Britishers in Jammu and Kashmir state in the 19th century. S. fragilis, S. caprea, S. babylonica, S. matsudana, S. amygdaloides, S. purpurea, S. viminalis, S. triandra and S. phylisifolia were the other Salix species that were introduced in Jammu and Kashmir during that period.24 Willow weighs an average of 281b/ft³ (450kg/m³) when seasoned, although cricket-bat willow weighs only 21-26lb/ft³ (340-420 kg/m³) when dry. Willow dries well and fairly rapidly, and degrade is minimal, but it often retains pockets of moisture and special care is needed in checking the moisture content. It works easily by both hand and machine, with a slight blunting on tools; sharp cutters are needed to avoid wooliness. The wood takes nails and glues well, and can be stained and brought to an excellent finish. (The encyclopedia of wood)

Cricket bat materials are regulated by the Marylebone Cricket Club (MCC), the governing body of cricket. The Rules of Cricket, Law 5.3.2 states 'The blade shall consist solely of wood'. Good quality willow takes many years to grow, high quality bats have 6–12 latewood rings. It takes 12-15 years for willow trees to mature completely. (Ben tinkler. Micheal Ramage). The blade of the cricket bat should be made from a stiff material with the handle of the bat having a lower Modulus of Elasticity (MoE). This will allow the highest energy transfer from the bat to the ball during impact, allowing the ball to travel further.

Cane

The handle is made up of materials like cane imported from Singapore, Kerala and Indonesia. Cane used in the handle allows the right balance between stiffness and flex, it can withstand force from hitting the ball. It is durable and will not snap easily.

Poplar
Handle is also made from poplar, but the shock resistance in this is very low. Poplar (Populusdeltoides) is popular among people of Kashmir for its wide range of utility. This tree is commercially grown in India, and has witnessed its own rise and fall unlike other trees/crops. It is the only popular deciduous tree species belonging to the family Salicaceae (willow family).

Handle cover for grip
This cricket bat grip is made using the first-string soft rubber, which ensures its highly shock absorption nature. In addition to this, it is used to provide a comfortable and strong grip. With the help of a handle grip cone the rubber grip bands are rolled down the length of the bat handle followed by labelling with stickers.

Glue and thread(Twine)
The handle is bound using the finest quality twine. The bat is rotated between the two blocks having nails and the handle is brushed with glue and whipped with twine that provides strength at the splice throughout its length. Natural twine is made out of hemp, cotton, flax, silk or sisal. Usually these types of twine can be seen in coated and uncoated varieties. The uncoated types give much more support and traction.

Rubber: It is an excellent shock absorbent, with great tear resistance and resilience. It is waterproof and has a good resistance to deterioration by sunlight.
Thinner and polish: The blade is finely polished using local varnish.

Tools
Bat making is a very consummate process and it requires prodigiously skilled carpenters. Some of the tools used in the manufacturing of a bat are similar to the tools of a carpenter.

- Hand planer locally known as randha: It is the tool used for hand shaping the bat.
- Bandsaw machine : This machine is used for cutting and shaping the bat. This machine is a power saw with a long, sharp blade consisting of a continuous band of toothed metal stretched between two or more wheels to cut wood.
- Pressing machine: The willow fibres have to be compressed in order to strengthen the timber sufficiently to withstand the impact of a cricket ball.
- Choke machine: It is used for V cutting of the bat and handle.
- Milling machine: It is used for scooping.
- Sander machine: It is used to remove extra material from surfaces, to make them smoother.
- Nali Machine: It is used to scoop out extra wood from the workpiece

Collection of Logs
The first step in bat making involves the purchase of Kashmir willow wood from different parts of Kashmir. The main source for willow wood is Bandipora, Baramulla and Anantnag itself. Each log is not less than 35 inches in circumference and costs about Rs 450-500/feet. The wood logs that are more than 35 inches in diameter are considered better for bat making. Each willow tree needs at least 12-15 years to mature before use. Wood is bought directly from the farmers. Cricket bat willow trees are normally purchased standing, with all felling, extraction, and clearing done by the contractor/unit holder. The trees should normally be felled once they attain at least 58 inches (147.5 cm) girth at 48 inches (142.3 cm) height from ground level. The price of trees is more dependent on volume than quality.

Cutting and Grading of logs

This step comprises willow logs cut into shorter lengths according to the dimensions required for bats. After felling, the trunk is sawn into three or four rounds (700 mm long), grading of wood happens at this stage, which depends on wood grains. Bat grains refer to the quality of the willow of your bat. The more the grains and the straighter they are, the better the quality of the bat. Randaayi (planing) makes the grains visible. Grains ranging from 9-10 make the first quality lot, and ten above is for the second quality. The higher the grade, the better the grain structure and lower the density.

Cutting of Clefts - Cheerayi

For cheerayi a bandsaw mill is used; the Kashmir willow logs are cut to take out Clefts for bat making. Wood logs are split longitudinally into defined wedge shapes known as clefts in a process known as riving. For a standard bat, clefts should be defect-free, have perfect fibres shapes, and have ideal moisture content.(SKUAST)29Cleft wood is split along the grain using tools like a froe or splitting wedges to create usable wood from round timber. Each piece is shaped to the rough shape of a cricket bat blade. The right side of the cleft must be chosen as the face, as this will become the face of the finished bat. Clefts are also sourced by some factory owners.

The near-finished size blades are pressure treated carefully to retain some of the natural air pockets in the timber to create lively and responsive bats. For this purpose, the bat is passed underneath the roller of the cricket bat press and the face and edges are compressed to ensure resilience and provide a hardened surface capable of withstanding the impact of a cricket ball. To achieve this, the blade should be pressed four times by applying up to 2,000 pounds of pressure per square inch.

Seasoning

The clefts obtained are then sun-dried for six months to 1 year for seasoning. It is the process of drying timber to remove the moisture content from wood. The main aim is to remove water at a uniform rate through the piece to prevent damage to the wood during drying. Clefts are arranged on top of another on the roofs of factories creating beautiful grids. For a leather bat clefts are seasoned for upto 12 months while as a tennis bat cleft is seasoned for 7 months.

V-Cleft Cut

After the seasoning term of the cleft is over, the perfectly seasoned ones are selected and gathered for further process. To fit the handle, it is a must to cut ‘V’ shape first into the blade, which is done using a customized table saw called Chouk machine or ‘V’cut machine. The V shape cut measures 7.5 inches. At this point, the bat maker decides which end is best suited for the handle and which is best for the toe. After the V cuts, some of the shaping is done by cutting extra edges.

Bat Handle

Handle-Making

Handle is the most important part of the bat. Handles are made separately and the process is quite extensive. Generally cane wood is used for making quality handles, the local wood is not preferred as they are less shock absorbent. Poplar wood handles are also made but are not considered as good quality handles. Cane handles are supreme, flexible and shock absorbing. A good handle absorbs the shock and eases the batsman’s play. The cane handle is cut on a table saw using a specialist jigsaw that matches the cut to that of the ‘V’ in blade. Cane wood used in factories of Anantnag is imported from Singapore and also sourced from other states of

India like Assam, Kerala and Goa. Handles are of two types. Type one comprises layers of cane wood sticked together by using local adhesive which are then clamped for 24 hours.

For some handles, a thin sheet of synthetic rubber is layered halfway the length to make it more shock absorbing. The layered handles may have 2 to 6 layers of cane wood and rubber. Type two is made by filling and shaping a single piece of cane wood. The most popular pattern has nine pieces of cane with three rubber inserts.

Handle-Fixing

The handle is 'dry fitted' (without adhesive) to check the fit. The fit should be tight enough for which a mallet is used to make sure the handle has reached the base of the joint. Once satisfied with the fit, a layer of local wood glue is applied in the V and the handle. Handle is aligned with the bat, it is then clamped and left to dry for at least 24 hours. The handle portion is then shaped and filed by cutting off extra wood.

Shaping

Shaping- Body

After fitting the handle, the batmaker gives the cricket bat its final shape by removing the extra wood with the help of a band saw machine. Shaping is one of the essential stages of bat making. Batmaker can create almost any profile by using several hand tools(planner, spokeshaves and rasps). Shaping is the most time-consuming stage of the bat making process. There are several factors to consider–finished weight, balance/pick up and the selected profile. The shoulders and handle are finished, blended, and the toe shape is cut at this stage. The bat needs to be expertly shaped, and for this, a maximum amount of wood should be left in the driving area while working the blade. Law 5 of the Laws of Cricket state that the length of the bat may be no more than 38 in (965 mm), the width no more than 4.25 in (108 mm), the overall depth no more than 2.64 in (67 mm) and edge no more than 1.56 in (40 mm) (sports crunch)

Scooping

Scooping is a process of removing material from a workpiece and is done with the help of a milling machine locally known as Nali machine. This is done to create the spine of the bat and also helps to eliminate extra weight in some bats. Scooping is mainly done around the shoulders and spine which is then refined with hands. Laws of cricket states that the edge of the bat could not be more than 1.56 inches / 4 cm, while the depth cannot be more than 2.64 inches / 6.7 cm(sports crunch)

Fine Shaping

This is where the skills of the beatmakers play a crucial role. At this stage the bat is refined with hand tools and perfect wedges and curves are given to the bat. Scooping and shaping at this stage should be done to achieve maximum weight distribution throughout the back of the bat. The best quality A-grade cricket bat weighs about 2 pounds 7 ounces.

Pressing

After V cut operation the bat is pressed. With the pressing operation, internal bat fibres come closer and provide strength to withstand the impact caused by the cricket ball. Pressing is an essential operation and is done carefully as over pressing can make the bat surface hard. So it is desirable to do this operation carefully with a skill hand or machine.

Sanding

Sanding is the act or process of smoothing or refining a surface with sandpaper. It gives a more fine finish to the Bat, this is done on the sanding machine or sander which has a sandpaper belt

running and the bat is sanded through different grits of sandpaper to refine the shape and provide a high quality finish.

Threading
Threading is the most exciting step in bat-making; Bat Makers have a unique setup for this process, where rolls of threads hang from hooks, and the bat rolls between two stones. Fevicol is applied on the bat handle, and the cord is spun around the handle.

Polishing with Varnish
Polishing gives the final shine to the bat. For polishing local varnish is used. Every bat factory has a polishing sector where hundreds of willow bats are polished and left to dry for 24 hours or even more to make sure that bat is completely dry.

Grips
This is the final step of bat making which includes gripping of the bat handle. For gripping a synthetic rubber sleeve is put on the handle to enhance the grip and make it comfortable for the batsman to hold it. Grips are available in different colours and different textures.

Adorning and Packaging
This step involves adorning the bat with brand stickers and logos.Stickers are put according to the company order or by the name of the factory. The bats are wrapped in transparent plastic sheets for protection against any damage.

Final Product
Final product of the process is a Kashmir Willow Bat. The bat is made of Salix alba var. caerulea also called Vir, cricket bat willow and Kashmir willow. It is used by cricketers to strike a ball. Earlier bats were fabricated in different sizes, depending upon the age and height of the person using these bats, but in 2019, ICC imparted the rules for bat making in their rule book. The Law number 5 of the Laws of Cricket states that the length of the bat may be no more than 38 inches (965 mm), the width not more than 4.25 in (108 mm), the overall depth should not be more than 2.64 in (67 mm) and edge should not be more than 1.56 in (40 mm). (ICC Playing handbook, 2018-19)

The size of Kashmiri willow bat is around 33.5 inches in length, and 4.25 inches in width, the length of the blade is 22 inches, and is made from Salvix Alba, Kashmiri willow, the handle is 11.5inches in length and is made from cane wood or poplar. The weight of the bat is around 900-1200g. The types of the cricket bat made of Kashmir willow are leather bat and tennis bat. Tennis bat weighs around 1000 g per piece. The drying period of this type of bat is 7 months. Leather bat weighs around 1200g and costs around Rs 2200-2500 per piece. The drying period of this type of bat is 1 year. Approximately 6-7 quintals of sawdust is spawned every month which is then used for charcoal making.

Designs & Description of Quality
A cricket bat design plays a crucial role in the game of cricket. The Kashmir Willow Bat makers over the years have adapted every necessary change required for making high performance bats. The handle of the bat has been adapted to changes over years from basic wood handle to good shock absorbing cane handle, every design intervention has been a part of bat manufacturing journey. The design changes were done according to the players requirement and bats were customised according to them, which was later in 2019 prohibited by ICC and specific dimensions and weight guidelines were set for international cricket bats. However bats sold to common people may differ slightly and may be customised.

The newer bats (manufactured after 2009) are thicker, heavier and have their mass distributed closer to the toe when compared to the earlier designs. An experiment conducted by TheofanoEftaxiopoulou, Lomas Persad and Anthony MJ Bull in 2017 by comparing old and new bats suggests that bat design can have an effect on performance. The newer bats confer a performance advantage in terms of the feel to the batsman, which will result in less energy absorption by the bat and by the batsman, and thus a greater proportion of the energy will be imparted to the ball.'Pick-up weight.' MoI (moment of inertia) has also increased dramatically over the years. This is a function of not only absolute weight but also geometry and balance. The results show that even if the bats were made of equal weight, the newer bats will be harder to 'pick up', but will impart greater energy to the ball due to the greater MoI resulting in higher potential energy when the bat is raised, thus conferring a performance advantage.

The quality of cricket bats also depends upon the quality of willow used and on the skill set of the bats maker. The availability of raw material climate is an important factor. The surface hardness of willow is an important characteristic of a cricket bat's performance, as a harder material will transfer energy to the ball more efficiently. Conversely, if the material is too hard, the bat may damage the ball, which would not be allowed. During manufacturing of willow bats, some knocking is performed whereby the surface is processed to compress the upper layer of cells, creating a hardened layer.

Willow is a preferred for bat making for its moisture content also. The moisture content in the wood plays a crucial role in manufacturing a quality bat. The willow bats manufactured in Kashmir are seasoned properly to avoid any excess moisture. Materials with too much damping will absorb energy from the ball, resulting in a bat that will not hit the ball far. In contrast, if there is no damping, the force transmitted to the player's hands is likely to be high, so the bat will be uncomfortable to use.

The Kashmir willow wood is hard and durable which aids in the prevention of flexing while hitting a ball. During impact of a ball onto the bat, flexing will occur throughout the material. If there is too much flexure, energy will be transferred from the bat to the player, instead of to the ball. However, if the bat is too stiff, vibrations will likely make the bat uncomfortable for the player to use.

J) Uniqueness:

The Kashmir Willow Bat is a specialized cricket bat made from Salix alba var. Caerulea cv. Culva, locally known as Kashmir Willow, Vir, or Cricket Bat Willow. This species is highly suitable for bat manufacturing due to its resilience and toughness, which makes it ideal for the demands of cricket.

Unique Characteristics of Kashmir Willow Bat:

Species and Ideal Growing Conditions:

The Kashmir Willow is derived from Salix alba and is grown in the Kashmir valley, particularly in areas like Baramulla, Anantnag, and Bandipora.

The climatic conditions of Kashmir, with its cold winters and mild summers, are particularly suitable for growing this species. Willows thrive in moist environments and are often found near water bodies like rivers and lakes.

Wood Properties:

The Kashmir Willow wood is known for being resilient and tough, which makes it perfect for striking the ball in cricket.

The softened impact provided by this willow allows for quality stroke play, making it highly preferred by batsmen who focus on technique.
This wood is easy to work on, allowing artisans to carve, glue, and sand it with precision to create well-balanced bats. The grain structure of Kashmir Willow typically features minimum 3 straight grains.

Botanical Background:
Willows belong to the genus Salix and the order Malpighiales, consisting of around 350 species of trees and shrubs, predominantly found in the northern hemisphere.
Kashmir Willow thrives in environments with moist soil and is usually found in riparian habitats (along rivers, stream banks) and wetlands (saturated soils). The tree's natural adaptability to these environments makes it a valuable resource for bat manufacturing.

Commercial Cultivation:
Large-scale cultivation of Kashmir Willow began around 1917, particularly around the Wular Lake. The Forest Department initiated willow plantations in wetlands like Harran, Hygam, Hokur-sur, Mirgund, and others, covering approximately 1,400 km² of land.

These plantations were initially aimed at fulfilling the fuelwood needs of the people of Kashmir, and as of now, approximately 5 million willow trees exist in the region, constituting about 16% of the total broad-leaved tree plantation in Kashmir.

Popularity in Local and National Markets:
The Kashmir Willow bat is widely used in local Indian cricket and is exported across India. Its affordability and durability make it a popular choice for amateur and semi-professional cricketers.

International Recognition:
The Kashmir Willow Bat has gained global recognition after receiving approval from the International Cricket Council (ICC). This distinction has allowed it to gain a foothold in international cricket.

Notably, Oman's cricket team used Kashmir Willow bats during practice sessions and was impressed by the bat's performance, which further boosted its international reputation.

The bat has also been used in international tournaments like the ICC T20 and Legends Cricket League. Famous cricketers, including Misbah-ul-Haq, Mohammad Yousuf, Munaf Patel, and Wasim Jaffer, have used Kashmir Willow bats in international matches.

International Demand:
The international market for Kashmir Willow bats is growing, with countries like Bangladesh, Bahrain, Kuwait, and New Zealand emerging as key customers. The growing demand is attributed to the recognition of Kashmir Willow's performance and quality, as well as the bat's affordability compared to other willow bats.

The Kashmir Willow Bat stands out for its durability, affordability, and suitability for high-quality cricket play. With increasing international recognition, especially in professional cricket, and a growing demand for sustainable, high-performance cricket gear, the Kashmir Willow bat is poised to make a significant impact in both local and international markets.

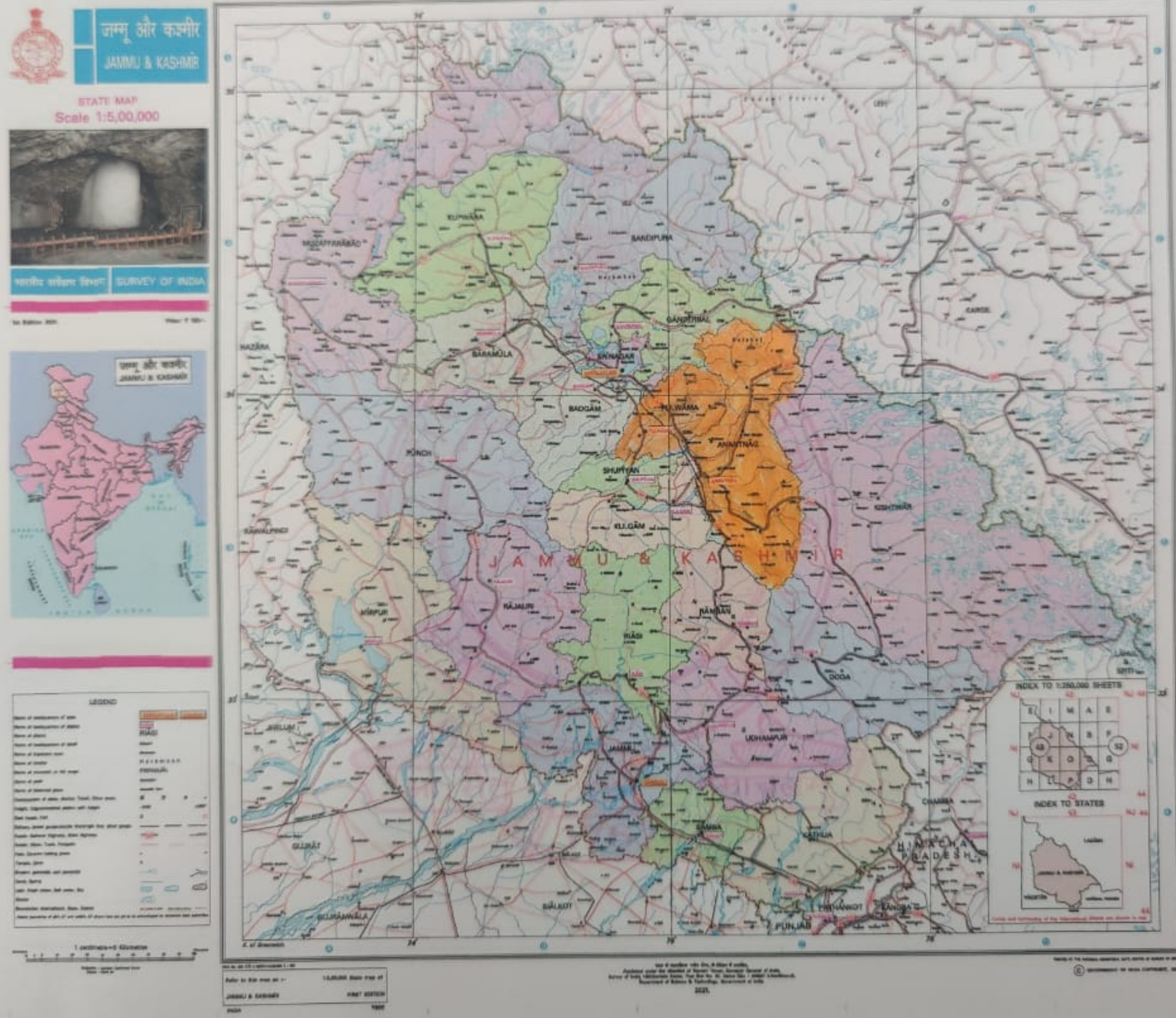
K) Inspection Body:

The proposed structure of inspection and implementation of the GI:

- One representative from Department of Industries & Commerce, J&K
- One representative from Development Commissioner Handicrafts, Ministry of Textiles, Government of India
- One representative from Directorate of Handicraft and Handloom, Kashmir
- One representative from Craft Development Institute, Srinagar
- One representative from Indian Institute of Carpet Technology (IICT)
- One representative from The KBA Industrial Handicrafts Cooperation ltd.
- One representative from Sher-i-Kashmir University of Agriculture Sciences and Technology- Kashmir (SKUAST-K)

L) Others:

FOR KASHMIR WILLOW BAT.



- ANANTNAG
- PULWAMA

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 921
Application Date: 11-07-2022

Application is made by Malda Silk Yarn Producers Association at Village: Gayeshbari Kalaphar, P.S: Gayeshbari, P.S: Kaliachak, District: Malda – 732 206, West Bengal, India for Registration in Part - A of the Register of **Malda Nistari Silk Yarn** under Application No. 921 in respect of Raw Silk Yarn and threads falling in Class – 23 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Malda Silk Yarn Producers Association

B) Address : Malda Silk Yarn Producers Association,
Village: Gayeshbari Kalaphar,
P.S: Gayeshbari, P.S: Kaliachak,
District: Malda – 732 206, West Bengal, India

Facilitated By:
1. Patent Information Centre, West Bengal State Council of Science & Technology
2. Directorate of Textiles, Handlooms, Spinning Mills, Silk Weaving & Handloom Based Handicrafts Division under Department of MEME, Government of West Bengal

C) Name of the Geographical Indication :

MALDA NISTARI SILK YARN

D) Types of Goods : **Class 23** – Raw Silk Yarn and threads.

E) Specification:

"MALDA NISTARI SILK YARN" - is produced form the cocoons of '*Nistari*' variety of mulberry silkworm (*Bombyx mori)* and its improved combinations (Multi X Multi or Multi X Bi). Nistari is a land race of mulberry silkworm indigenous race to the Malda region. The uniqueness of this eco race is natural yellow colour of the silk due to presence of two kinds of carotenoids (lutein and B-carotene) and little amount of violaxanthin in silk gland of the silkworm. Malda Nistari silk yarn have world finest micron (12.5-14.5 micron/ filament) which makes the texture of this silk quite soft. Quality parameters of the Malda Nistari Silk Yarn are mentioned below -

Technical Specifications of the Malda Nistari SilkYarn

Characteristics	Details
Colour of yarn	Bright golden yellow
Size (Denier)	18/20, 20/22, 22/24, 26/28 & 28/30
Cleanliness	75 - 88 %
Average Neatness	74 - 87 %
Tenacity (gm/den)	3.7
Elongation	15 -18 %
Cohesion (Strokes)	40 to 50
Thickness of single cocoon filament	2 - 2.4 denier
Single cocoon filament length	350 – 800 metre

A single cocoon filament of mulberry fiber density 1.34 g/cm3. Silk has excellent flexibility, enabling the fibers to withstand deformation of 20-25% of their initial length. Up to deformations of -2% silk completely recovers it's size if the stress is removed. The fibers are completely elastic.

F) Description:

Since ancient times, the geographical position along with the entire ecological condition of Malda played a significant role in development of Malda as a hub for silk trade. The very name of the silkworm variety is derived from the Bengali word 'NISTAR' which means "getting relief " that relates with the farmers getting successful cocoon crops even during adverse tropical climatic condition of Malda district.

The warm-humid climate of the region helped *Nistari* silk worms to live, grow and to form cocoons. Silk worms formed cocoons 'in a temperature between about 60^{o} and 85^{o} F the best temperature. These temperatures are also suited for mulberry growth.

The nature of Malda's soil played a vital role for development of the mulberry trees. The district being drained by youthful rivers such as Ganga, Mahananda, Kalindri, Pagla, Phulahar, etc, processes soil which very suitable for the cultivation of mulberry. The clayey loamy soil with slightly acidic pH ranging from 6.2 - 8.2 is perfectly suitable for mulberry plantation. Further, the annual rainfall of 60- 64 inches along with perineal rivers provided irrigation facilities for all-round the year production of mulberry. The land of Malda produced four crops of mulberry leaves in a year. Plantation was renewed once in three or four years to ensure a constant succession of leaves.

Malda Nistari Silk Yarn production is an artisanal and labour intensive process. Generations of families have mastered these skills involved- mulberry cultivations, silk worm rearing and the reeling of cocoons. More than 50% of the labour force is women and mostly from minority backward communities.

More than 50% of the labour force is women and mostly from minority backward communities. The silk is bright golden yellow in colour of 2-2.4 denier in thickness. In West Bengal, Baluchari fabric, Garad Saree, Korial Saree is produced by using Malda Nistari Silk Yarn as weft. Malda Nistari Silk Yarn is exported to Bhutan where it is used for weaving traditional attires called Gho and Kira. The Malda Nistari Silk Yarn is having a good market in northern part of India especially Varanasi cluster to use it as weft yarn for making handloom sarees.

G) Geographical area of Production and Map as shown in page no:

The silk production happens all blocks of the district of Malda. Malda is located in central territory of West Bengal. It lies between 24' 30" and 25' o 32' 30" North latitude and 87' o 48' and 88 o 33' 3" east longitude. In West Bengal state Malda Nistari silk yarns are produced mainly in Malda , Murshidabad and Birbhum districts. Among these districts, Malda contributes about 70% of the total raw Malda Nistari silk production. The entire district of Malda; Khargram, Nabagram, Jalangi, Beldanga and Berhampore Sadar blocks of Murshidabad district and Bhadrapur, Nalhati, Rampurhat I & II, Kotasur and Mallarpur blocks of Birbhum are particularly involved in producing "Malda Nistari Silk Yarn".

H) Proof of Origin (Historical records):

- Silk industry had been of high merit in Malda ever since the older times. *Arthasastra* attributed to Kautilya mentioned in 321 B.C., that the variety of textile commodities made of silk known as Kausheya, were sourced from the country called Pundarikasha (ancient name of Malda region).
  (*Kautilya's Arthashastra: Book II, Chapter 11, shloka 107*)
  (R. Shamasastri, translation Kautilya's Arthashastra, Pg:83)
- "Malda was one of the important centres of silk manufacture and trade in Bengal from ancient times. It has been mentioned in the Arthashastra of Kautilya that the silk cloth manufactured in the Paundra (Pundravardhana) country was black in colour and was as soft as the surface of a gem. The Paundra country was also famous during Kautilya's time for the production of the Kshauma cloth, which was another variety of silk cloth." - J. C. Sengupta, Malda District Gazetteer, Govt, of West Bengal, Calcutta, 1969, p. 101
- W.W. Hunter in his '*A Statistical Account of Bengal (Districts of Malda, Rangpur and Dinajpur, Vol. VII)*' published in 1876, mentions that Old Malda is a seat of thriving cotton and silk manufactures, and both the French and Dutch had factories here. The English factory was at English Bazar, other side of Mahananda river. He remarked that the silk cultivation was popular under the different region **during** the Hindu Dynasty at Gaur.
- W.W. Hunter in the same book writes - "Mulberry shrubs for the feeding of silk-worms are cultivated by nearly three-fourths of the peasants of Maldah. The rice they also grow feeds them ; butwith the mulberry they pay their rent."
- Production of high quality silk fabric at Gaur-Malda has been referred to in Aain-e-Akbari. According to a local tradition recorded by W.W. Hunter, trading in Cloths manufactured in Malda prevailed with Russia even in the 16th century. In his '*A Statistical Account of Bengal (Districts of Malda, Rangpur and Dinajpur, Vol. VII)*' published in 1876, he mentioned the tradition that one Shaik Bhik set sail for Russia about three hundred years prior to that date. (1576 A.D.) with ships laden with silk cloth, and that two of his ships were wrecked somewhere in the neighbourhood of the Persian Gulf. "
- J. P. Losty in a an article titled*'Early Views of Gaur and Pandua by the Indian Artist Sita Ram*', contributed to Journal of Bengal Art, v. 1, 1996, [pp. 189-205] gives details of sporting expedition undertaken by Lord Hastings (then Governor General of Bengal) in early 1817 and when there visited the ruins of Gaur and other sites. He quoted the journal of Warren Hastings - " February 2nd. We marched to English Bazaar, the residence of Mr. Chester. At this place the greatest part of the silk sent home to England is collected..…... It was curious to see the millions of silkworm cocoons laid up here. They are baked in ovens to kill the grub, in which state they may be preserved for six months. Mr. Chester told me that when the grubs are thrown out, after the silk had been spun off, the eagerness of the jackals to get them is surprising. "

- The same article gives photographic evidence of Silk production in Malda through the watercolour painting by Sita Ram, native draftsman of Lord Hastings. In the picture shows two men processing silk. The cocoons are being boiled in water and then dried, the silk is being drawn out from the cocoons and wound on spindles. There are great baskets of cocoons waiting to be processed. *Watercolour by Sita Ram, c. 1820. 212 by 350 mm. British Library, Add.Or.4982*.
- Walter Hamilton noted that Malda is a "Place to great trade and produces much silk". Hamilton Walter, - East India Gazetteer, (London) 1815, P.546
- "The Silk industries concentrated in these riverine regions. As per result, the different areas under Malda, like English Bazar, Kaliachak, Manikchak, Mothabari emerged as prominent centres for silk cultivation." - W. Hamilton, A Geographical, Statistical And Historical Description of Hindostan and Adjacent Countries, Volume 1. London: John Murray, 1820, p.29.
- M. O. Carter in his 'Final Report on the Survey and Settlement Operations in the District of Malda 1928 – 1935' discussed on sericulture as a household activity.
- "The entire silk industry depended on people who were engaged with that industry. Earnest human endeavours were made for raising luxuriant crops of mulberry, which was the only food of the domesticated silk worms. A large number of the total population in Malda, proved their excellent ability for the development of silk industry." - Letter written by C. C. Hyde, Resident at Gungypore Factory to George Saunders, Acting President and Members of the Board of Trade, Fort William, dated 22 February, 1831. Board of Trade, Commercial Proceeding Number 17, Volume 498, 1 March 1831, Part 1. West Bengal State Archives [Henceforth WBSA], Calcutta.
- "Silk worm rearing was an important part of the silk industry. The silk producing industry essentially engaged rearing of silk worms for the production of cocoons. Silk worm rearing as well as its growth was an art in hands of the rural based silk related artistic workers in Malda. The Punda caste was the hereditary silk worm rearing caste. They lived mainly in Malda ….. They were the best, most intelligent, and most prosperous of all cocoon rearers." - N.G. Mukherji, A Monograph on the Silk Fabrics of Bengal. Calcutta: Bengal Secretariat Press, 1903, p.8.
- "The comparatively high percentage of industrial workers is mainly due to the silk industry, which is the main staple of the district. In Malda, silk was harvested three times in every year. The local name of the harvest was bund. The bunds named after the three months in which those were ripped. There were three bunds – (1) November bund, (2) March bund, and (3) July Bund. The November bund was the chief bund. From the beginning of silk cultivation to formation of cocoons of the silk, cultivators took special care." *G. E. Lambourn, Bengal District Gazetteers Malda, Calcutta: The Bengal Secretariat Book Depot, 1918.*
- "INDIAN INDUSTRIES: I.—Sericulture and Silk Manufacture." *Journal of the Royal Society of Arts*, vol. 67, no. 3479, 1919, pp. 579–580. *JSTOR*, www.jstor.org/stable/41348027. : The report of Industrial Commission presided by Sir T. H. Holland mentions that in Malda district of Bengal sericulture and silk manufacturing is industry of chief importance.
- "Malda retained her ancient craftsmanship of silk production, and at present raw silk is the most important commercial product of Malda." - Bulletin No.69, Deptt. of Industries, Govt. of Bengal, - sericulture in Bengal, Calcutta 1936.
- Bhattacharya, Ananda. "Reconsidering the Sannyasi Rebellion." *Social Scientist*, vol. 40, no. 3/4, 2012, pp. 81–100. *JSTOR*, www.jstor.org/stable/41633803. : "large quantities of silk produced in Malda were sent to Mirzapur and Benares through the sannyasi traders. Jonathan Duncan, Resident of Benares, reported that Beni Giri (the noted sannyasi merchant of Benares who also held a large estate in Mymen- sing) had a trading

connection with Malda. Similarly, William Harwood mentioned the sannyasis' purchasing capacity of Malda silk to the members of the Committee of Circuit in 1773.

- Ingraj Bazar, formerly English Bazar, also called Angrezabad, is a city in Malda district, West Bengal state. It lies on the west bank of the Mahananda River. The city was chosen as the site of the British East India Company's silk factories (trading stations) in 1676. The Dutch and French also had settlements there. It was constituted a municipality in 1869. A major road and rail junction, Ingraj Bazar is an important silk and agricultural trade centre. There is a sericultural station nearby. Britannica, The Editors of Encyclopaedia. "Ingraj Bazar". Encyclopedia Britannica, 11 Mar. 2016.

I) Method of Production:

The production of 'Malda Nistari Silk Yarn' consists of three primary stages as listed below -

A. Moriculture
B. Silkworm rearing
C. Silk reeling

Moriculture - Moriculture refers to the cultivation of mulberry plants, whose leaves are used as silkworm feed. Mulberry silk worm, being monophagus insect, feeds only on mulberry (Morus indica) leaves. The stem grafting method is the most commonly used method for mulberry plantation. Here, cuttings that are approximately 22 centimeters in length, containing at least 3 buds, are extracted from the stem of a mature mulberry plant. These cuttings are either directly planted or first kept in nurseries and then transplanted. The mulberry leaves can be harvested from the plants to feed the silkworms. Mulberry shoots are harvested and the foliage is fed to the silkworms kept indoor for rearing.

Silk worm rearing - Female silkmoths lay anything from around 300 – 500 eggs at any one time. These eggs eventually hatch to form silkworms, which are incubated in a controlled environment until they hatch into larvae (caterpillars).

Brushing - Brushing is the separation of newly hatched larvae from their egg shells and transferring them to rearing trays from the egg cards. The newly hatched larvae are black, bristly and called ants.

Feeding the larvae - The larvae were fed with mulberry leaves. Proper and adequate food provided to the larvae because it greatly influence the quality of cocoon. Feeding must satisfy both the appetite and nutritional requirements of the larvae. Normally 4 - 6 feedings were provided per day. During initial days the larva prefer tender leaves whereas late stage larva prefer coarser leaves.

Chawki care - From hatching to its full-grown stage, the silk worms pass through five instars and the worms up to stage two are called young age worms or chawki. As they are susceptible to infections and vulnerable to adverse weather conditions, special care is required for rearing of chawki. The silkworms feed continually on a huge amount of mulberry leaves to encourage growth. It takes around 6 weeks to grow to their full potential (about 3 inches). At this time, they'll stop eating and begin to raise their heads – that's when they're ready to spin their cocoon.

Mounting - Mounting is the process of transferring the ripe worms to the mountages. At the end of the larval period the mature silk gland becomes prominently visible through the skin of the larva when it is the time to pick up the mature larva and release them in the cocooning

mountages. Mountages are traditionally made of bamboos. On the mountage, the ripe worms exude silk, spin the cocoon around itself and transformed into the pupa inside it. A mature larva once released attached to a secure frame, immediately starts spinning cocoon by rotating its body in a figure-8 movement around 300,000 times – a process which takes around 3 days. But it takes 72 – 120 hours to turn into pupa from larva. Each silkworm produces just one single strand of silk, which measures about 100 metres long and is held together by a type of natural gum, called sericin. Silkworms are traditionally reared either in bamboo trays kept in racks or in long shelves in tiers made of bamboo.

Harvesting - The cocoon is harvested from the cocooning mountage only after completion of pupa formation. For continuation of generations 5% seeds cocoons are selected and kept in grainage hall for emergence of moth and production of eggs. Rest 95% good cocoons are stifled for reeling purpose.

Cocoon stifling - This is a pre-reeling process by which the pupae inside the cocoons are killed, without compromising on the quality of silk. The cocoons contain live pupae which will emerge out with in 10-12 days of cocooning. Once the moth emerge out, the shell becomes of no use to reel since the adult emerges out by piercing the cocoon shell. Hence, cocoons after being harvested are dried either in the sun or in the cocoon dryers by using wood or coal. The primary object of drying cocoons is to kill the pupae and to reduce the water content of fresh cocoons.

Deflossing - Floss is the outer most layer of cocoon which is only a protective covering and is not reelable. Prior to reeling, floss has to be removed by any of the methods to avoid obstruction during reeling.

Cocoon ridding - After deflossing the cocoons, in the process of ridding, cocoons are separated according to their sizes by simple sieves into big, small and medium size cocoons and collected in separate containers. This will facilitate the reeling operations easy.

Cocoon cooking - To reel silk yarn from the cocoons, they are first cooked in hot water at 95-97^{0}C for 10-15 minutes. This cooking will enable the sericin portion to get softened and make unwinding easy without breaks.

Reeling - Reeling is a process by which the silk filaments from cocoons are combined and wound on to a reel to make silk thread of standard sizes. The reeling process requires trouble free running without much breaks &with minimum wastage. The performance in reeling i.e. the reelability is dependent upon factors such as cooking performance cocoons and non -broken filament length.. Depending upon the required thickness (denier) of silk thread filaments, 8-10 such filaments are reeled together on a reel to get a yarn. This process of drawing silk fibre from the cocoons is called ‘reeling’. An efficient reeler will maintain the fixed number of cocoons per end to produce uniform denier silk. Country made wooden charka (called Katghai in local language) is mainly used to reel the silk cocoons. Of late different types of improved reeling machines are evolved by the Central Silk Board and are being gradually introduced to replace the country made charka for production of international quality of raw silk from improved silkworm breeds.

Predominantly, Country Charkha popularly known as Khatghai is used for reeling and some Motorized Charkha and Cottage Basin devices are available. The total no of Country Charkha exists 3523, 3004 and 1000 in Malda, Murshidabad and Birbhum districts respectively. Also, 883 and 69 Motorized Charkha as well as 22 and 1 Cottage Basin is available in Malda and

Murshidabad districts of West Bengal respectively. The production of Country Charkha (Khatghai) and Motorized Charkha ranges between 1 to 2 Kg per day. These yarns are used as weft for silk fabric production.

By introduction of Cottage Basin during 1994 there is an improvement of productivity and quality. The production for 20/22 denier mulberry raw silk yarn is 5 to 6 Kg per day and raw silk quality exists A to C grades as per Indian Standard (IS 15090; 2002). In the year 2023-2024 in Malda district, total 11 Nos Multi End Reeling Machines were installed along with 1 no in Murshidabad district. The production has been enhanced to 10 Kg. per day for same raw silk yarn denier. The quality of these yarns exists between A to B grades as per Indian Standard (IS 15090; 2002).

J) Uniqueness:

Malda Nistari Silk Yarn is a unique and traditional textile product, derived from the Nistari variety of mulberry silkworm. This silk is renowned for its natural yellow/golden color, which distinguishes it from other silk varieties. The process of producing this silk involves a blend of skilled labor and a favorable environment, with each step contributing to the final product's distinctive qualities.

Uniquiness of Malda Nistari Silk Yarn:

Origin of Silk:
Nistari Silkworm: The silkworms responsible for Malda Nistari Silk Yarn are the Nistari variety, an indigenous land race well adapted to the region's climatic conditions. Unlike other silkworm species (such as Eri, Muga, or Tusar), Nistari silkworms feed exclusively on mulberry leaves.

Natural Golden Color: The silk produced by the Nistari silkworm is naturally golden or yellow in color due to the presence of carotenoids, specifically lutein, p-carotene, and a small amount of violaxanthin. This unique pigmentation is retained during boiling in plain water but is slightly reduced during the degumming process when chemicals like sodium carbonate and soap are used.

Ecological and Environmental Impact:
Climate Suitability: The warm-humid climate of the Malda district, with temperatures ranging from 60°F to 85°F, is ideal for silkworm development and mulberry growth. These temperatures support both the growth of mulberry trees and the rearing of silkworms.

Soil Conditions: The clayey loamy soil of the region, enriched by rivers such as the Ganga and Mahananda, has the right pH balance (ranging from 6.2 to 8.2) for mulberry cultivation. The soil’s quality, along with an annual rainfall of 60–64 inches, ensures a constant supply of mulberry leaves for silkworms, allowing for four harvests per year. The cultivation is sustainable, with plantations renewed every 3–4 years.

Human Skill and Labor:
Traditional Artisanal Craftsmanship: The production of Malda Nistari Silk Yarn is a labor-intensive process, deeply embedded in the region’s cultural heritage. The skills involved, such as silkworm rearing, mulberry cultivation, and silk reeling, have been passed down through generations.

Role of Women: Over 50% of the labor force involved in the production is women, primarily from minority and backward communities, showcasing the gender inclusivity of this craft.
Reeling Process: The silk yarn is carefully reeled from the harvested cocoons using wooden charkas (called Katghai). Skilled reelers ensure a uniform denier (thickness) of the silk by maintaining a fixed number of cocoons per reel.

Historical Significance:
Malda has a rich tradition in silk production that dates back to ancient times, around 321 BC. The region has long been recognized as a center for silk production and trade, with the Nistari silkworm being a local variety that reflects the area's ecological and cultural identity.

Malda Nistari Silk Yarn stands out for its unique natural golden hue, achieved through the Nistari silkworm's specific pigmentation. The silk's production is not just a technical process but a cultural heritage that has been preserved over centuries. The combination of skilled human labor, a favorable environment, and the distinctive characteristics of the Nistari silkworm make this silk a special product that reflects the essence of Malda's traditional silk industry.

K) Inspection Body:

GI inspection Body has been constituted with the following members:

1	Director, Directorate of Textiles (Handlooms, Spinning Mills, Silk Weaving & Handloom Based Handicrafts Division), Department of Micro & Small Scale Enterprises and Textiles, Government of West Bengal.	Chairman
2	Representative, Office of Deputy Director of Sericulture	Member
3	Representative, Directorate of Textiles (Handlooms, Spinning Mills, Silk Weaving & Handloom Based Handicrafts Division) West Bengal.	Member
4	One Representative from Patent Information Center (PIC) West Bengal Council of Science & Technology, Government of West Bengal	Member
5	One representative of Silk Conditioning and Test House, Maldah	Member
6	Representative, Central Sericulture Research and Training Institute (CSRTI) Extension Centre, Malda	Member
7	The Development Officer (Handloom) of the concerned region.	Member
8	An expert on the relevant field form Academia/industry	Member
9	Two Representative from producer society/ Handloom Cluster / State / National Awardees nominated as nominated by District Magistrate of the concerned district.	Member

In order to maintain the quality of the 'Malda Nistari Silk Yarn', an internal watchdog mechanism is already in place.

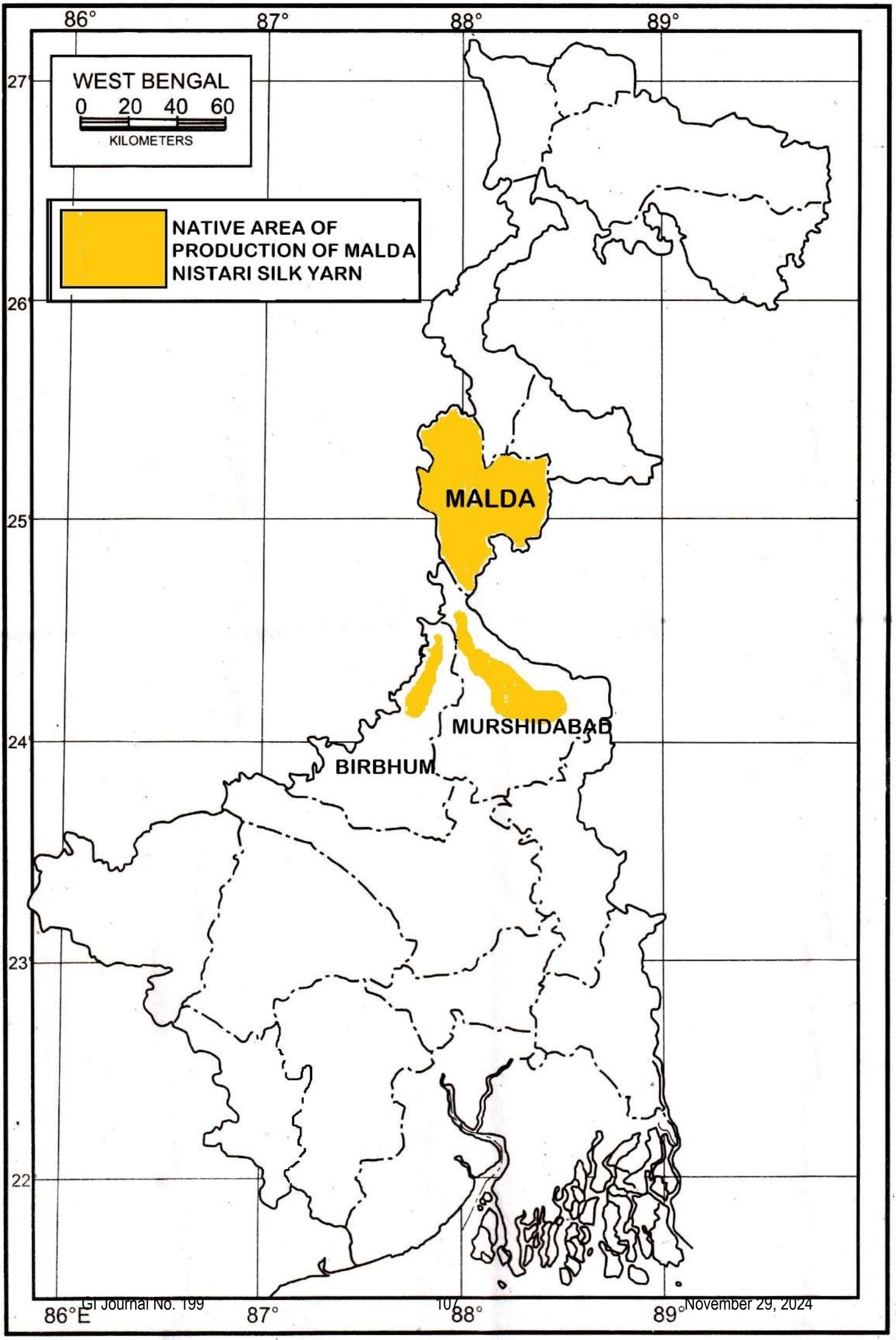
- Silk Conditioning and Test House (SCTH) - It is set up by Central Silk Board (CSB) for testing and gradation of the raw silk yarn produced.
- Central Sericulture Research and Training Institute (CSRTI) Extension Centre is located in the district is responsible for the quality mulberry and quality silkworm eggs distribution.
- Under the supervision of Deputy Director of Sericulture, Malda, there are four govt. seed farms and three govt. drainage which ensure quality seed distribution.

L) Others:

Socio-economic Profile: Malda Sericulture has a glorious heritage in Silk production with its people carrying out the rich tradition and culture to present day. At present, the district of Malda contributes 6% of National production & 70% of State production. More than 21,000 acres of Land are under Mulberry cultivation and more than 62,000 families are directly or indirectly maintaining their livelihood from Sericulture. Out of the total families involved in Sericulture, sericulture farmers, reelers, traders etc about 90% belongs to minority community. Women also play a vital role by contributing 60% of work force of the sericulture family.

Annual turnover: Malda district now produces about 16000 MT commercial reeling cocoons, 2100 MT raw silk, 700 MT silk wastes & 130 MT of matka yarn. The turnover of the said produces ranges from 430 -450 crores of rupees per annum.

Market profile: Malda Nistari Silk Yarn is exported to Bhutan where it is used for weaving traditional attires called *Gho* and *Kira*. The Malda Nistari Silk Yarn is having a good market in northern part of India especially Varanasi cluster to use it as weft yarn for making handloom sarees. More so, coarser yarn having 26/28 denier is having high demand in south India. In West Bengal, *Baluchari* fabric is produced by using Malda Nistari Silk Yarn as weft. Similarly, *Jamdani* fabric is also produced in Mirzapur, Murshidabad by using Malda Nistari Silk Yarn as weft. Most recently, under the National Fibre Mission, first ever Silk Park in Eastern India has been set up in Malda district. It is expected to improve the market access of the Malda Nistari Silk Yarn and also facilitate its export.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KILOMETERS
NATIVE AREA OF PRODUCTION OF MALDA NISTARI SILK YARN
MALDA
MURSHIDABAD
BIRBHUM
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Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1020

Application Date: 06-12-2022

Application is made by Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal) at 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India for Registration in Part - A of the Register of **Kamarpukur Sada Bode** under Application No. 1020 in respect of Food Stuff – Sweet falling in Class – 30 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal)

B) Address : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal), 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India

Facilitated By:

1. Patent Information Centre, West Bengal State Council of Science & Technology, DSTBT-GoWB
2. West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL) under Department of Food Processing Industries and Horticulture, Government of West Bengal

C) Name of the Geographical Indication :

KAMARPUKUR SADA BODE

D) Types of Goods : **Class 30** – Food Stuff - Sweet

E) Specification:

Kamarpukur Sada Bode is a unique type of traditional sweet of Bengal. It is popular since ages and exclusively prepared in the area of Kamarpukur of district Hooghly.

The term 'Sada' means white in bengali, the 'Bode' defining Bundis. Here, the Bundis are white in colour which is the speciality of the sweet. These are soft, flocculent and syrupy small granules having shapes like pearls. No food colour is added in its preparation.

The kamarpukur sada Bode is made up of flour obtained from the seeds of yardlong bean, a locally grown leguminous plant of West Bengal.

Indigenous aromatic rice, Gobindobhog rice flour is used in the batter along with the yardlong bean flour. The proportion of Gobindobhog rice flour and yardlong bean flour is maintained at 2:1.
Kamarpukur sada bode is immersed in concentrated sugar syrup. The use of potable water from ground water well of Kamarpukur has significant role for the taste and softness of the sweet.

Texture analysis report of Kamarpukur Sada Bode describes it as a very soft product having a low hardness of 205.40±112.84 g with a high value of springiness and cohesiveness.

Kamarpukur Sada Bode contains approximately 12.2± 2.0% protein, 28± 1.8% fat and about 263± 12 mg of calcium per 100 gm.

Chemical and microbiological analysis report of Kamarpukur Sada Bode:

Parameters	**Result**
Energy (kcal)	478.72 ± 25.5
Carbohydrate (%)	44.48 ± 10.5
Protein (%)	12.2 ± 2.0
Fat (%)	28 ± 1.8
Ash Content (%)	0.04 ± 0.04
Presence of Food Colour	Absent
Total Soluble Solid(%)	11.08 ± 3.5
Sucrose (%)	42 ± 3.8
Calcium (mg/100)	263 ± 12
Vitamin D(IU/100)	0 ± 8
Aerobic Plate Count in cfu/g	$1.9 \times 10^2 \pm 1 \times 10^2$
Coliform in cfu/g	*<10*
E. Coli in cfu/g	*<10*

F) Description:

Kamarpukur Sada Bode is a unique sweet of Bengal confectionary in terms of its ingredients, method of preparation, appearance, taste and mouth feel characteristics. Kamarpukur Sada Bode is white in colour, soft and syrupy small granules having shapes like pearls. No extraneous colour is added in its preparation.

In contrast to any other Bundi available in India which is golden yellow in colour and made up of Bengal gram flour mainly, Kamarpukur Sada Bode is totally different in its ingredient and thus in its final appearance.

The granular white bundis of Kamarpukur Sada Bode are made up of flour obtained from the seeds of yardlong bean, a locally grown leguminous plant of West Bengal. The seeds are processed in a special way and ground in form of flour. This is the main ingredient of the Kamarpukur Sada Bode.

The seeds are first collected and sun dried to remove the moisture. Then the seeds are split into half and then soaked in water. This helps to remove the fine filaments attached to the seed. Sun drying is conventionally followed to make the seeds dry and moisture free. The seeds are then ground to make the flour, it should not be too fine, a little coarse grinding is necessary for the final texture of the Bundi.

West Bengal has so many indigenous aromatic rice varieties, Gobindobhog rice is one of those unique varieties that is reputed for its pleasant aroma. Here Gobindobhog rice flour is used along with the yardlong bean flour at a ratio of 2:1.

Texture analysis report of Kamarpukur Sada Bode describes it as a very soft product having a low hardness of 205.40±112.84 g with a high value of springiness and cohesiveness. Kamarpukur Sada Bode contains approximately 12.2± 2.0% protein, 28± 1.8% fat and about 263± 12 mg of calcium per 100 gm.

Potable water of the ground water well of this area has a very sweet taste and that is very important factor for the characteristic soft and smooth texture of Kamarpukur Sada bode. Chemical analysis report of the water shows nearly neutral pH of 7.27, Total Dissolved Solids 156 mg/L that is much lower indicating purity of water. The Hardness of water is also very low. Water is used for preparation of the batter of bundi and this soft and pure water contributes greatly to the texture of Kamarpukur Sada Bode.

There are quite a few numbers of confectioners in Kamarpukur engaged in preparation of Sada Bode. They follow traditional practices and efficient human skills while preparing this unique sweet.

G) Geographical area of Production and Map as shown in page no:

Kamarpukur of Hooghly district is famous for this Sada Bode. Kamarpukur is a village in the Goghat II CD block in the Arambag subdivision of the Hooghly District in West Bengal state of India. It is the birthplace of Sri Sri Ramakrishna and it is a pilgrimage to the inhabitants of the nation.

Kamarpukur is located at 22.91°N 87.65°E and has total population 3,121 (2011census).

Particulars of Chandannagar:

Sl. No	Particulars	Details
1	District	Hooghly
2	Latitude-longitude	22.91°N 87.65°E
4	Altitude	9 m (30 ft)

H) Proof of Origin (Historical records):

1. Sri Sri Ramkrishna Kathamrita was translated by Mahendranath Gupta in 5 volumes which were first published at Kathamrita Bhawan, 13/2 Guru Prasad Chaudhury Lane, Calcutta in the years 1902, 1904, 1908, 1910 and 1932 respectively.
   Here the author mentioned that Sri Ram Krishna was particularly fond of Sada Bonde (white bonde) of Kamarpukur, a special confectionery made of 'Borboti Kolai' flour (Yardlong bean seed flour).
   In the book The Oxford Companion to Sugar and Sweets the mention of 'Kamarpukur Sada Bode' is made having reference to the above-mentioned Sri Sri Ramkrishna Kathamrita under reference section.

2. Translation of the highlighted portions of 'Lok Sanskirti Gobeshana' (Publication year: 1999) edited by Sri Sanat Kumar Mitra
   Here, it is well mentioned that Kamarpukur is famous for its unique sweet 'Sada bode'.
   Any sweet maker of Kamarpukur would say his ancestors used to prepare Kamarpukur sada Bode which was favorite of Gadadhar (Sri Ram Krishna Paramhansa).

   This Bode is very much white in colour because of the use of Yardlongbean flour. The yardlong bean is locally grown by some farmers in this region and supply to the confectioner's shop. Many of the sweet makers themselves cultivates the bean. This Bode is only available at Kamarpukur-Joyrambati area.

I) Method of Production:

Ingredients:

1. Yardlong bean seed flour
2. Gobindobhog Rice flour
3. Sugar
4. Water
5. Milk
6. Ghee/Vanaspati
7. Crushed cardamom

Method of preparation:

Pre preparation of seed and making of the flour:

The yardlong bean seed is locally known as 'Roma kolai bij'. It is a locally grown leguminous crop and has tiny seeds.

The seeds are first collected and sun dried to remove the moisture. Then the seeds are split into half and then soaked in water. This helps to remove the fine filaments attached to the seed. Sun drying is conventionally followed to make the seeds dry and moisture free. The seeds are then ground to make the flour, it should not be too fine, a little coarse grinding is necessary for the final texture of the Bundi.

Preparation of the batter:
Gobindobhog Rice flour is another important ingredient that is mixed in 2:1 ratio with the seed flour in the batter.

Water is added in a measured quantity to prepare the batter. The consistency of batter is of great concern as the formation of bundi, its shape entirely depends on it and the measurement

of water and mixing all the ingredients in right proportion are result of efficient skill and expertise of local confectioners.

Frying the Bode:
The batter is spread on porous ladle by hand and through the pores the batter comes out drop by drop into hot oil/ghee. The temperature of oil is another important factor for perfect frying of the bundi. As the batter is of white colour the droplets are also white, care is taken while frying so that the natural white colour can be kept intact even after frying. It is fried just for 1-1.5 minutes in hot oil.

Preparing sugar syrup:
Measured quantity of sugar is mixed in water and the mixture is boiled to make the syrup. The consistency of sugar syrup is much dense than the clear syrup used in Rasogolla preparation and a bit sticky in touch. A small amount of milk is added to clarify the sugar syrup and to remove the impurities of the sugar.

Soaking in Sugar Syrup:
After frying the pearl like granules are transferred to the concentrated sugar syrup. This is previously prepared by mixing sugar and water and boiling the same.

The bundis are soaked in syrup for 2-3 hours. Meanwhile the fried bundi soak the syrup and swell 1.5-2 times in its size. The syrupy Kamarpukur Sada Bode are then taken off the syrup and kept aside.

J) Uniqueness:

Uniqueness of Kamarpukur Sada Bode
Distinctive Ingredients: The key ingredients that make Kamarpukur Sada Bode stand out are the flour of yardlong bean and Gobindobhog rice flour. Unlike conventional bode, which uses Bengal gram flour giving it a golden yellow color, this unique sweet has a white, pearl-like appearance due to the use of yardlong bean flour and Gobindobhog rice flour. Gobindobhog rice is an indigenous, aromatic rice variety famous in Bengal for its distinct fragrance and flavor, adding depth to the taste of Sada Bode.

Regional Influence: The Kamarpukur region of Hooghly, located by the Hooghly River, has a highly fertile alluvial soil that promotes the cultivation of aromatic rice and leguminous plants like yardlong bean. The agro-climatic conditions of the region, including sufficient rainfall, create an optimal environment for these ingredients, contributing to the unique flavor profile of the sweet.

Water Quality: The groundwater well of Kamarpukur has a natural sweetness and purity, contributing significantly to the soft and smooth texture of the Sada Bode. The low TDS (Total Dissolved Solids) and low hardness of the water (pH 7.27) play a crucial role in achieving the characteristic texture of the sweet. The chemical composition of the water is ideal for making the batter and enhancing the overall quality.

Traditional Handcrafted Process: The preparation of Kamarpukur Sada Bode follows an entirely manual, handcrafted process that has been practiced for over 122 years by skilled confectioners. Every step, from batter preparation to kneading, frying, and syrup preparation, is done by hand, ensuring that the sweet retains its unique qualities. The batter is poured into hot oil using a porous ladle, and the syrup is carefully cooked to achieve the right consistency—not too sticky, but thick enough to soak the fried bode.

No Artificial Additives: One of the distinguishing features of Kamarpukur Sada Bode is that it is prepared without any artificial colors, relying solely on the natural ingredients for its appearance and flavor. This maintains the authenticity and natural essence of the sweet.

Texture and Mouthfeel: Kamarpukur Sada Bode is known for its soft texture, which is verified by a texture analysis report showing low hardness (205.40±112.84 g), high springiness, and cohesiveness. The sweet's soft texture is a direct result of the pure water used in its preparation, enhancing its delicate mouthfeel.
Immersion in Sugar Syrup: After frying, the Kamarpukur Sada Bode is immersed in concentrated sugar syrup, which further elevates its taste and contributes to its softness. The syruping process ensures the sweet absorbs the right amount of sweetness without becoming overly sticky, balancing the overall flavor.

Human Skill in Production
The creation of Kamarpukur Sada Bode relies entirely on human skill and expertise. From the preparation of the batter, kneading, and frying to the careful management of the sugar syrup, every step is done manually by skilled artisans. These age-old techniques, honed over generations, ensure the quality and authenticity of the sweet. The use of traditional, handmade methods is integral to maintaining the unique characteristics of Kamarpukur Sada Bode, making it a cherished confection of Bengal.

K) Inspection Body:

Representatives of Department of Food Processing Industries and Horticulture, Govt. of West Bengal	Member
Representative from West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL)	Member
Director/representatives, Directorate of MSME, Govt. of West Bengal	Member
Representative of Department of Science & Technology and Biotechnology, Govt. of West Bengal	Member
Representatives of Patent Information Centre, WBSCST, Govt. of West Bengal	Member
Representatives of District Magistrate Office, Hooghly	Member
Public Analyst (Food & Water), West Bengal Public Health Laboratory, Dept. Of Health and Family Welfare, Govt. of West Bengal	Member
Expert members (at least two) from Academics/Industry/Line department/ any other relevant neutral agency	Member

L) Others:

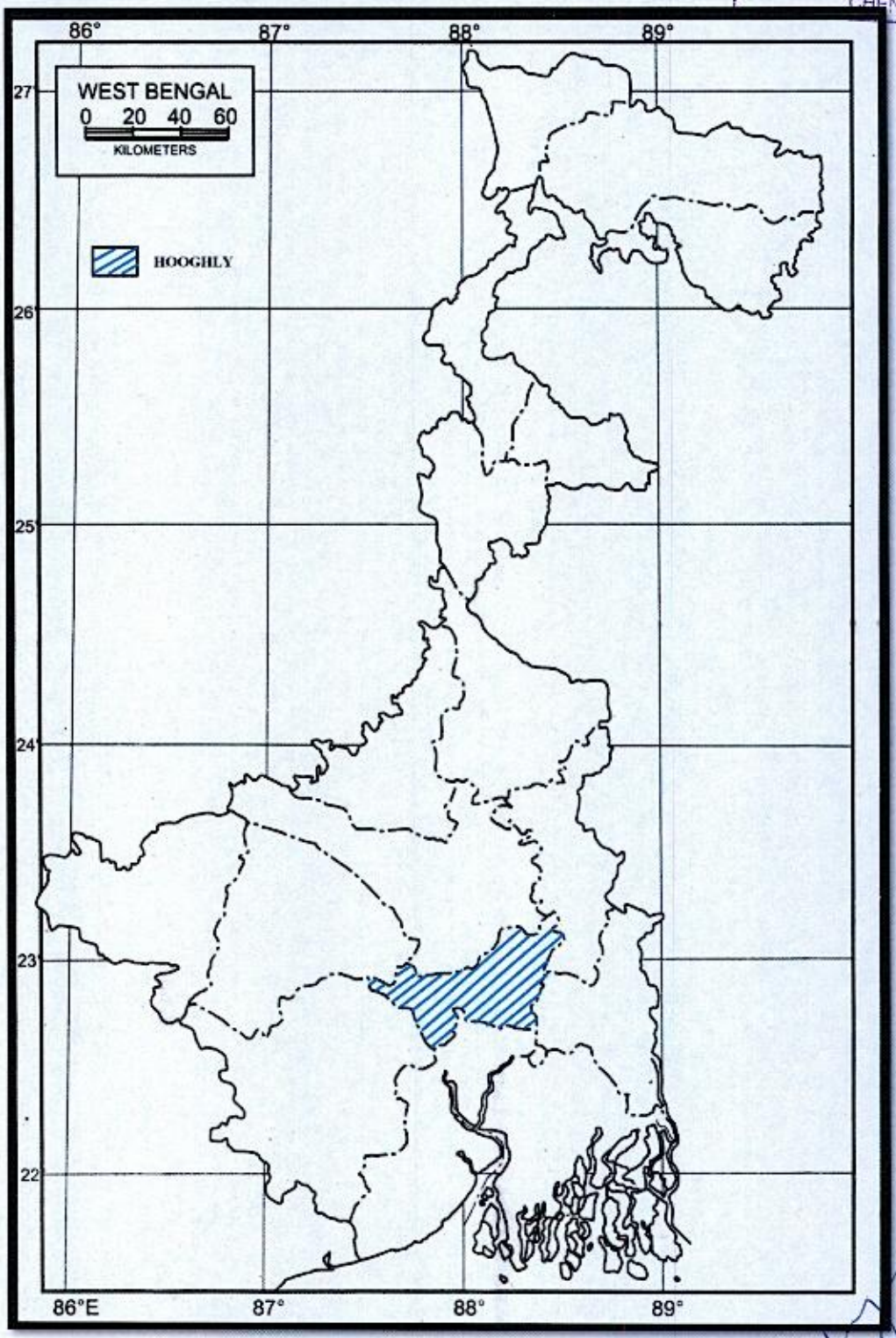
Socio economic profile
There are so many confectioners of Kamarpukur who are engaged in preparation of this unique sweet. Since the era of Sri Sri Ramkrishna local confectioners are preparing the Bode and till date the popularity of Kamarpukur is somewhat synonymous with ‘Kamarpukur Sada Bode’.

ANNEXURE- I

GOVT OF INDIA
Geographical Indications Registry,
Application
No. 1020
CHENNAI

Area of Production of 'Kamarpukur Sada Bode'

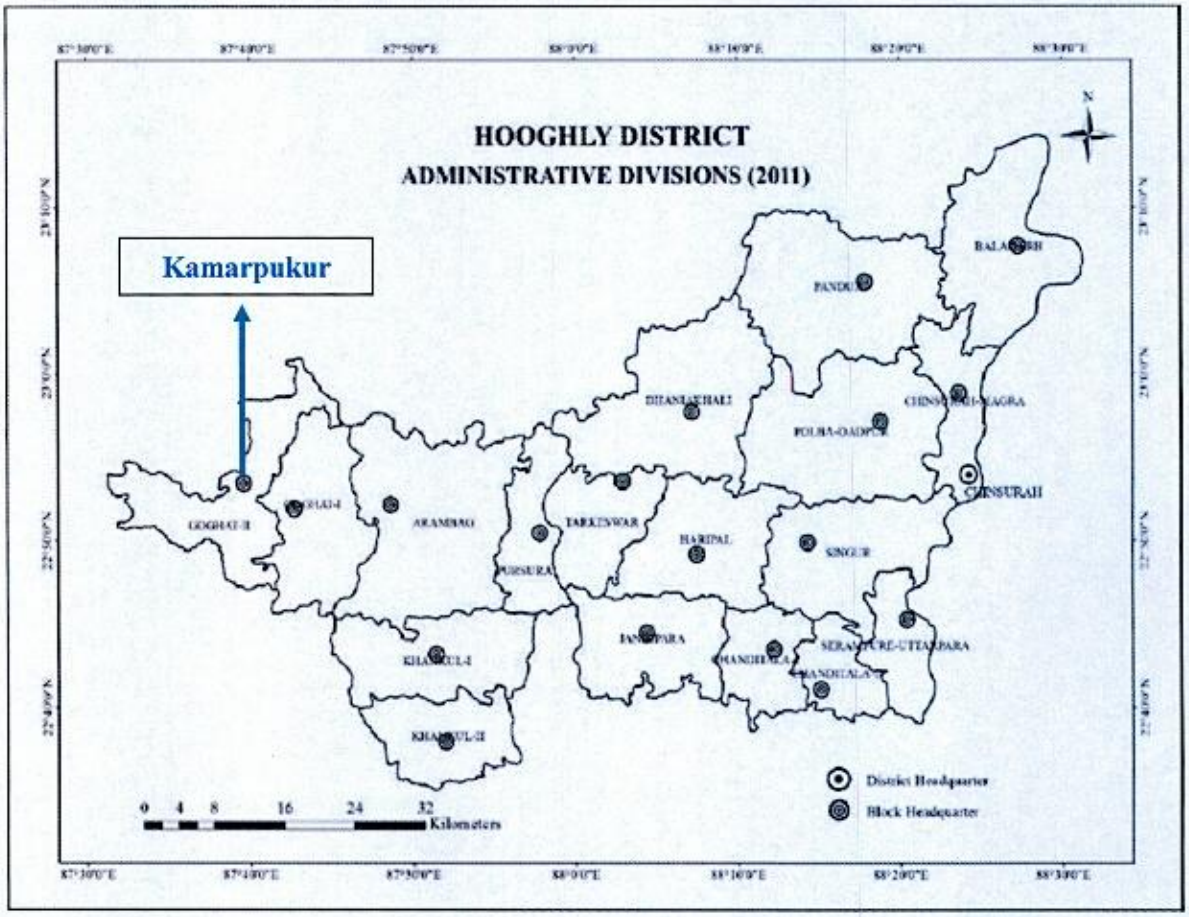
Hooghly district



Scientist C
&
Nodal Officer
Patent Information Centre
West Bengal State Council of Science & Technology
Vigyan Bhawan, Block-DD, Plot-23,
Sector-I, Salt Lake City, Kolkata-700 064

GOVT OF INDIA
Geographical Indications Registry,
Application
No. 1020
CHENNAI

Area of Production of 'Kamarpukur Sada Bode'



Kamarpukur of Hooghly district

Scientist C
&
Nodal Officer
Patent Information Centre
West Bengal State Council of Science & Technology
Vigyan Chetana Bhavan, Block-DD, Plot-2C/3,
Sector-I, Salt Lake City, Kolkata-700 064

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1022

Application Date: 06-12-2022

Application is made by Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal) at 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India for Registration in Part - A of the Register of **Banglar Nolen Gur Sandesh** under Application No. 1039 in respect of Food Stuff – Sweet falling in Class – 30 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal)

B) Address : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal), 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India

Facilitated By:

1. Patent Information Centre, West Bengal State Council of Science & Technology, DSTBT-GoWB
2. West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL) under Department of Food Processing Industries and Horticulture, Government of West Bengal

C) Name of the Geographical Indication :

BANGLAR NOLEN GUR SANDESH

D) Types of Goods : **Class 30** – Food Stuff - Sweet

E) Specification:

The fame of Bengal confectionary is somewhat synonymous with this delicious Banglar Nolen Gur Sandesh. It is fresh quality pure chhana based sweet with a unique taste and flavour of Banglar Nolen Gur.

Banglar Nolen Gur is liquid date palm molasses, well known for its unique aroma, flavour, taste and brilliant natural colour which are imparted to the Banglar Nolen Gur Sandesh to make it extra ordinary in taste and flavour.

Nolen gur is seasonal item and procured from fresh date palm sap collected in winter only, for this seasonal availability of Banglar Nolen Gur, this Banglar Nolen Gur Sandesh is also made in Winter season only.
Banglar Nolen Gur Sandesh has a very soft and smooth texture. It is famous for its mouth melting characteristics.

Banglar Nolen Gur Sandesh can be differently shaped. Round, square, 'barfi', 'sankha' different sort of moulds are used to shape Banglar Nolen Gur Sandesh.

No starch is used in preparation of Banglar Nolen Gur Sandesh.

Banglar Nolen Gur Sandesh is light to moderate in sweetness and healthier than any other sweet where refined sugar is used as only sweetener.

Use of nolen gur results in a characteristic natural flavour and brownish colour to the Banglar Nolen Gur Sandesh, hence, no other artificial flavour or colour added

Banglar Nolen Gur Sandesh is sound in nutrition in terms of protein, Ca and Vitamin D. Banglar Nolen Gur is a main ingredient Banglar Nolen Gur Sandesh that is a good source of iron having approximately 8.1 ± 1.2 mg of iron/100ml.

F) Description:

Banglar Nolen Gur Sandesh is small fudge like delicacies made by pressing the dough of Indian cottage cheese into pretty moulds shaped like flowers, fruits, or shells etc. this is perhaps the most important sweet dish without which the tradition of Bengal confectionary remains incomplete.

Banglar Nolen Gur Sandesh is usually prepared in the winter season when the Banglar Nolen Gur (date palm molasses) becomes available. Banglar Nolen Gur is well known for its unique aroma, flavour, taste and brilliant natural colour which are imparted to the Banglar Nolen Gur Sandesh to make it extra ordinary in taste and flavour.

Banglar Nolen Gur Sandesh has a very soft and smooth texture. It is famous for its mouth melting characteristics.

Banglar Nolen Gur Sandesh can be differently shaped. Round, square, 'barfi', 'sankha' different sort of moulds are used to shape Banglar Nolen Gur Sandesh.

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Banglar Nolen Gur Sandesh is light to moderate sweet and healthier than any other sweet where refined sugar is used as only sweetener.

Use of nolen gur results in a characteristic natural flavour and brownish colour to the Banglar Nolen Gur Sandesh, hence, no other artificial flavour or colour added.

Banglar Nolen Gur is a main ingredient Banglar Nolen Gur Sandesh that is a good source of iron having approximately 8.1 ± 1.2 mg of iron/100ml that (annexure-IV)

For Banglar Nolen Gur Sandesh making, fresh quality 'Chhana' is first prepared from fresh milk adding lemon juice to it. It is pressed to remove the whey water out of it. This is an important step that determines the softness of Chhana and finally the Banglar Nolen Gur Sandesh prepared out of it. Too much pressing may lead to dryness of Chhana and too little pressing may result in sogginess. Expertise of age-old sweet makers is of great importance in this step.

The isolated pure cottage cheese is kneaded thoroughly by the hands to make it soft and smooth in texture; small amount of sugar is added to it while kneading. Measured amount of Nolen Gur is mixed to the cheese mix and kneading is further continued to make it smoother and by doing so the flavour and aroma of Banglar Nolen gur blend well throughout the Chhana. Usually one-fourth measure of sugar is substituted by an equivalent quantity of Banglar Nolen Gur.

Kneading is the most important step to be followed by the confectioners that lead to desired soft and smooth mouthfeel of Banglar Nolen Gur Sandesh.

The cheese mix is transferred to moulds of different shape & size and pressed a bit to obtain the Banglar Nolen Gur Sandesh of the desirable shape.

G) Geographical area of Production and Map as shown in page no:

Banglar Nolen Gur Sandesh is prepared in all over West Bengal except the northern hilly district i. e Darjeeling, Kalimpong etc.

Latitude and Longitude of the West Bengal: 22.9868° N, 87.8550° E

H) Proof of Origin (Historical records):

1) Mrs. J Halder has described the art and fame of Bengal Confectionary highlighting the special sweets of certain places in his book "Bengal Sweets'' in the year of 1926.

- Here the author identified the 'Sandesh' as the queen of Bengal sweet and documented the information regarding the use of 'Nolen gur' for preparing the 'Sandesh'.
- The seasonal availability of the new gur and the production process of 'Sandesh' are discussed under the heading of "Gurer Sandesh".

2) Pranab Roy has mentioned 'Sandesh' being an integral part of Bengali cuisine in his book "Banglar Khabar" (Publication year: 1987)

Translation of highlighted portions:
Sandesh is the most tempting sweet in the platter of food loving Bengali. It is loved and praised by Raja- Maharajas since ages and even to the common most people.

Sandesh is most preferred sweet as offering to God. The main ingredient of Sandesh is 'Chhana' (Indian cottage cheese) and sugar or 'Nolen Gur'

I) Method of Production:

Ingredients:

- Indian Cottage cheese (Chhana)
- Banglar Nolen Gur (date palm molasses)
- Sugar
- Ghee

Production process:

The consecutive stages of **Banglar Nolen Gur Sandesh preparation** are described below.

First step: Preparing the 'Chhana' (Indian cottage cheese):

First step of Banglar Nolen Gur Sandesh preparation is the production of cottage cheese for which fresh quality milk is brought to a rolling boil and lemon juice is added to it and stirred. The milk will curdle; boiling is continued till clear whey gets separated from the cheese. The cheese is collected out of the whey.

Second step: Collecting the 'chhana' and kneading:

The cheese is now taken in a muslin cloth and washed under running water to get rid of the lemony smell. The chhana is pressed further to remove excess water. This is an important step that determines the softness of Chhana and finally the Banglar Nolen Gur Sandesh prepared out of it.

Too much pressing may lead to dryness of Chhana and too little pressing may result in sogginess. Expertise of age-old sweet makers is of great importance in this step.

Now the cheese is kneaded thoroughly with the heal of palm. Once the cheese becomes smooth (approx 5 minutes) sugar is added and kneaded again till all the sugar melts in (another 2-3 minutes).

Third step: Mixing the 'Gur' to the mashed Chhana:

Banglar Nolen Gur is added to the cheese mix. The dough is again kneaded to make it smoother in texture and by doing so the flavor and aroma of jaggery blend well throughout the mass.

Fourth step: Molding:

To give shape to the 'Banglar Nolen Gur Sandesh', stone or terracotta moulds are used following the tradition. Little oil or ghee (clarified butter) is Brushed inside the mould and small amount of the cheese mix is transferred, pressed a bit to obtain the 'Banglar Nolen Gur Sandesh' of desirable shapes.

J) Uniqueness:

Banglar Nolen Gur Sandesh is a beloved Bengali sweet, often considered the epitome of Bengali confectionery. This small, fudge-like delicacy is made by pressing dough from Chhana (Indian cottage cheese) into intricate molds, creating shapes like flowers, fruits, or shells. It is a quintessential treat during the winter season when the Banglar Nolen Gur (date palm molasses) is freshly available. This sweet is an essential part of Bengali culture and tradition, prized for its distinct flavor, texture, and the unique use of Nolen Gur.

Uniquiness of Banglar Nolen Gur Sandesh:

Key Ingredients and Flavor:

Chhana: The primary base of Banglar Nolen Gur Sandesh is pure Chhana, unlike other regional sweets that often incorporate kheer or khoya. The purity of the Chhana contributes to its smooth, soft, and mouth-melting texture.

Banglar Nolen Gur: This date palm molasses is the star ingredient, known for its unique aroma, flavor, and brilliant natural color, which imparts a distinct taste to the Sandesh. It is less calorific than refined sugar, making it a healthier choice. Additionally, it is a good source of iron, with approximately 8.1 ± 1.2 mg of iron per 100ml.

The molasses has a lower viscosity and brix value compared to other similar molasses, which contributes to the Sandesh's unique texture and flavor.

Texture and Characteristics:
Soft and Smooth: The Sandesh is known for its soft, smooth, and mouth-melting texture, which is a hallmark of high-quality Chhana and the perfect balance of Nolen Gur.
No Artificial Additives: The sweet is free from artificial colors or flavors. The distinct color and aroma come entirely from the Nolen Gur.

Nutritional Benefits:
The inclusion of Banglar Nolen Gur adds nutritional value, particularly by contributing iron and providing a complex form of sweetness that is less processed than refined sugar.
The Production Process: A Blend of Art and Skill

Preparation of Banglar Nolen Gur:
Collection of Sap: The production of Nolen Gur starts with a labor-intensive process where workers, known as siulis, climb the date palm trees (locally called khejur) during the night. They make an incision on the tree and tie an earthen pot to collect the sap. The sap falls drop by drop into the pot overnight.

Boiling the Sap: In the early morning, the siulis bring the pots down, and the sap is boiled in large iron vessels to form the molasses. This process requires careful control to ensure the perfect consistency, flavor, and aroma.

Chhana Preparation:
Straining and Pressing: The preparation of Chhana involves straining the cottage cheese from the whey and pressing it to remove excess water. The softness of the Chhana is critical to achieving the perfect texture for the Sandesh. If the Chhana is pressed too much, it becomes dry; too little, and it remains soggy.
The expertise of the sweet makers plays a crucial role in determining the right texture and moisture content of the Chhana.

Kneading and Mixing:
The Chhana is then kneaded with the heel of the palm, a process that ensures the mixture is smooth and reaches the correct consistency for shaping. The Nolen Gur is gradually mixed in to infuse its flavor and aroma into the Chhana.

Shaping:
Finally, the Sandesh is shaped using traditional stone or terracotta molds, which come in various shapes like flowers, fruits, and shells. These molds are essential for giving the Sandesh its elegant look, and shaping requires a steady hand and expertise.

Human Skill and Traditional Knowledge

The production of Banglar Nolen Gur Sandesh is not just a technical process but also a cultural tradition that requires expert craftsmanship. The siulis, who harvest the sap, and the sweet makers who prepare the Chhana and shape the Sandesh, contribute their skills and age-old knowledge passed down through generations. The entire process is a testament to the rich artisan heritage of Bengal.

Human involvement is crucial at every stage of production, from the collection of sap to the final shaping of the Sandesh. The balance between quality ingredients, traditional techniques, and expert craftsmanship ensures that the Sandesh is of the highest quality, with the perfect flavor, texture, and appearance.

Banglar Nolen Gur Sandesh is not only a delightful sweet but also a symbol of Bengali heritage. The natural sweetness from Nolen Gur, combined with the softness of Chhana, creates a sweet that is both nourishing and luxurious. The traditional methods of preparation, combined with the skilled hands of artisans, make each piece of Sandesh a work of art.

K) Inspection Body:

Representatives of Department of Food Processing Industries and Horticulture, Govt. of West Bengal	Member
Representative from West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL)	Member
Director/representatives, Directorate of MSME, Govt. of West Bengal	Member
Representative of Department of Science & Technology and Biotechnology, Govt. of West Bengal	Member
Representatives of Patent Information Centre, WBSCST, Govt. of West Bengal	Member
Representatives of District Magistrate Office	Member
Public Analyst (Food & Water), West Bengal Public Health Laboratory, Dept. Of Health and Family Welfare, Govt. of West Bengal	Member
Vivekananda Institute of Biotechnology, Sri Ramkrishna Ashram, Nimpith	Member
Expert members (at least 2) from Academics/Industry/Line department or other relevant neutral agency	Member

L) Others:

Socio Economic Profile:

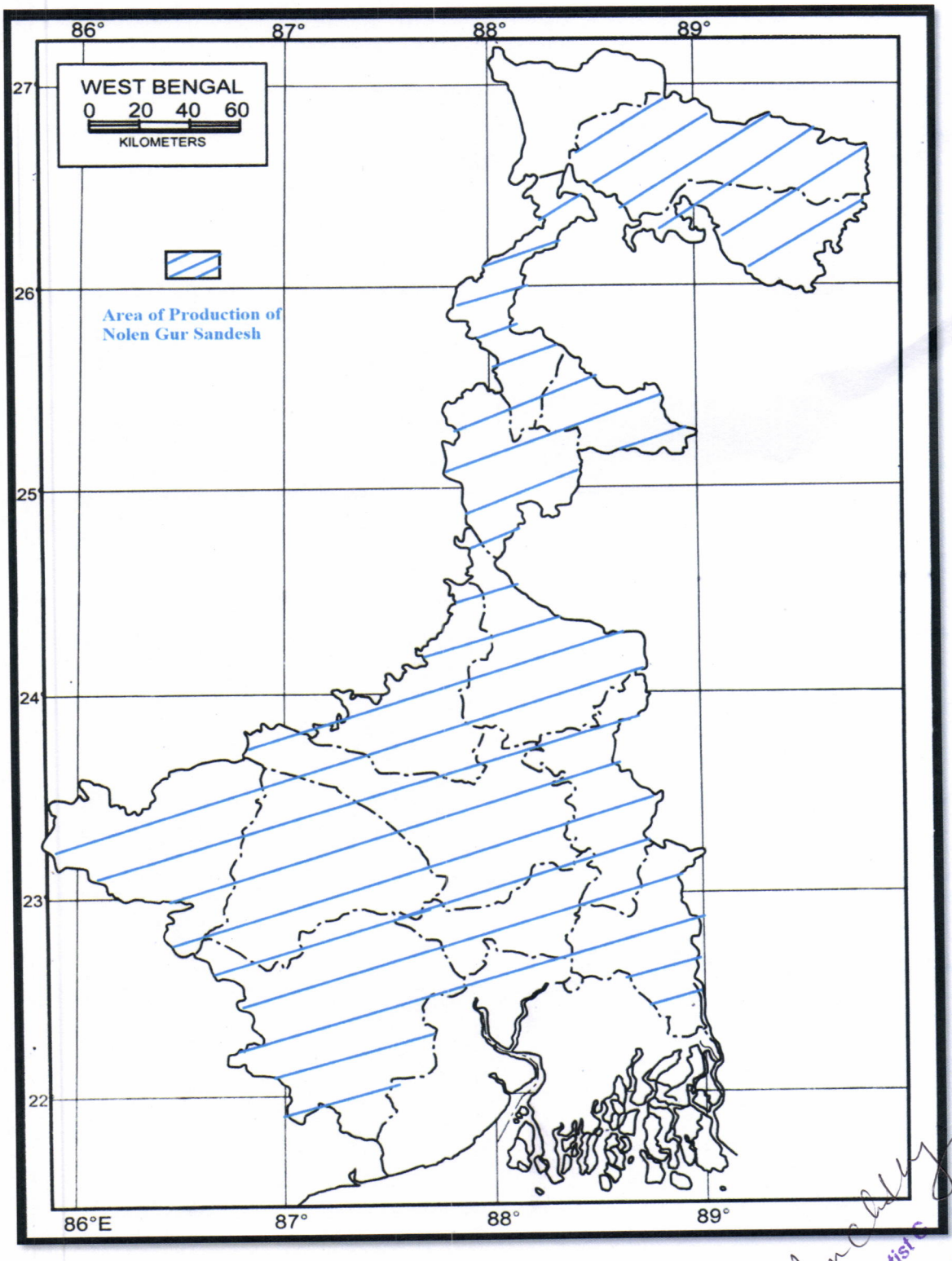
A huge number of confectioners of Bengal are engaged in preparation of this exotic ‘Banglar Nolen Gur Sandesh’ each season.

- Total Number of Producers in West Bengal: 1,00,000
- Quantity of approximate production of sweet (in each season): 18,00,000 Kgs Daily

GOVT OF INDIA
Geographical Indications Registry,
Application
No. 1022
CHENNAI

Area of Production of Nolen Gur Sandesh

Nolen Gur Sandesh is prepared in all over West Bengal except in Darjeeling and Kalimpong



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Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1035
Application Date: 21-12-2022

Application is made by Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal) at 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India for Registration in Part - A of the Register of **Murshidabad Chhanabora** under Application No. 1035 in respect of Food Stuff – Sweet falling in Class – 30 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal)

B) Address : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal), 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India

Facilitated By:

1. Patent Information Centre, West Bengal State Council of Science & Technology

2. West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL) under Department of Food Processing Industries and Horticulture, Government of West Bengal

C) Name of the Geographical Indication :

MURSHIDABAD CHHANABORA

D) Types of Goods : **Class 30** – Food Stuff - Sweet

E) Specification:

Murshidabad Chhanabora is a famous Bengali sweet originated in Berhampur City of Murshidabad district of West Bengal. It is mainly a Chhana (Indian cottage cheese) based sweet with a distinct texture of outer hard covering and soft inner syrupy part. This fried sweet item is delicious in taste and unique in its ingredient and method of preparation. Murshidabad Chhanabora is round in shape, blackish brown in colour from outside with a hard somewhat crusty appearance. The internal portion is soft, fluffy and juicy. It is immersed in concentrated

sugar syrup that penetrates through the outer parts into the core and makes it soft. This soft internal core within a hard, crusty outer part is the speciality of Murshidabad Chhanabora.

Here locally grown hand milled whole wheat flour is used along with chhana that contributes to the distinct texture of the sweet.

Texture analysis report of Murshidabad Chhanabora shows, considerably high value of hardness and chewiness that is due to the deep frying of Murshidabad Chhanabora at low flame for prolonged time. Murshidabad Chhanabora has a high value of Springiness and Gumminess. In Food science, gumminess is a texture profile that combined hardness and cohesiveness.

The chemical analysis report of the milk of Murshidabad is found having a very good combination of milk fat and solid not fat as per FSSAI standards, high protein content (3.6 ± 1.0%) and an appreciable amount of calcium and vitamin A, D. No pathological organism is traced in the milk sample, hence conforming to the best quality milk. (chemical analysis report enclosed- Annexure IV). Chhana is the main ingredient of Murshidabad Chhanabora, best quality chhana is produced from this highly nutritious milk of Murshidabad.

The potable water from the ground water well of Murshidabad is very sweet in taste with minimum amount of total dissolved solids and hardness. This water plays an important role while preparing the dough out of chhana and flour and the sugar syrup. The smoothness of the dough is the key factor of the characteristic spongy inner portion of Murshidabad chhanabora.

Murshidabad Chhanabora contains 8.7 ± 2.0 gm/100 gm protein, 242 ± 12.0 mg/100gm calcium and approximately 62 ± 8 IU/100 gm vitamin D.

Chemical analysis of Murshidabad Chhanabora

Energy (kcal): 413.8 ± 25.5
Carbohydrate (g/100g): 58± 10.5
Protein (g/100g): 8.7± 2.0
Fat (g/100g): 16.3± 1.8
Sucrose (g/100g): 46± 3.8
Calcium (mg/100g): 242± 12.0
Vitamin D (IU/100): 62± 8
Vitamin A (IU/100): 74± 10
Total Soluble Solids (%): 14.68± 3.5
Peroxide Value (Milliequivalent of Oxygen/Kg of the extracted fat): 4.4± 1.5
Free Fatty Acid: 0.65± 0.25

Microbiological analysis of Murshidabad Chhanabora

Aerobic Plate Count in cfu/g: $4.9 \times 10^2 \pm 1 \times 10^2$
Coliform in cfu/g: <10
E. Coli in cfu/g: <10

F) Description:

Murshidabad Chhababora is an Indian cottage cheese based sweet that has a distinct taste, texture as well as method of preparation. According to local legend, it was prepared when Nawab Nazim of Bengal ordered his cook to make a dessert that would be neither 'Rasogolla'

nor ‘Pantua’. It is assumed that the sweet was originated in the regime of Nawab. Its reputation transcends the boundary of Bengal day by day.

Murshidabad Chhanabora is mainly round shaped. blackish brown in colour from outside with a hard somewhat crusty appearance. The internal portion is soft, fluffy and juicy. It is immersed in concentrated sugar syrup that penetrates through the outer parts into the core and makes it soft. This soft internal core within a hard, crusty outer part is the speciality of Murshidabad Chhanabora.

Superior quality Chhana is mashed well along with whole wheat flour added to it and shaped in the form of round ball. Crushed cardamom is used as stuffing inside the sweet. These are now deep fried In Ghee in such a unique manner so that the outer surface of the sweet becomes reddish black in colour and the inner side become porous and spongy.

The sweet makers of Murshidabad are preparing this sweet since generations and their human skill is very much required in each step of preparation of Murshidabad Chhanabora. The preparation of chhana, mixing of flour, the ratio, extent of kneading of the dough all these are very important for the texture of the final product. Frying is next important After frying, the sweets are immersed in concentrated sugar syrup and kept in it for some times. Once it becomes enough syrupy, it is served.

In the areas of Murshidabad, the highly fertile alluvial soil and the tropical climate with considerably sufficient rainfall promotes natural growth of a variety of grass and weeds. In contrast to the other places, here, the cows are fed natural fodder native to this region that makes the milk special in taste and composition. Chemical analysis report of fresh milk of Murshidabad shows, a very good combination of milk fat and solid non-fat with good amount of protein (3.6±10 %). which is even higher than the standard protein content of cow milk (apporox 3.26%) as per Indian Food Composition Tables published by national Institute of Nutrition (Annexure- V). This high amount of protein indicates purity of milk, highly nutritious pure chhana is obtained by curdling this milk and this chhana is the main ingredient of Murshidabad Chhanabora that is also a very good source of protein. Murshidabad Chhanabora contains 8.7 ± 2.0 gm/100 gm protein, 242 ± 12.0 mg/100gm calcium and approximately 62 ± 8 IU/100 gm vitamin D.

Here locally grown hand milled whole wheat flour is used along with chhana that contributes to the distinct texture of the sweet.

Texture analysis report of Murshidabad Chhanabora shows, considerably high value of hardness and chewiness that is due to the deep frying of Murshidabad Chhanabora at low flame for prolonged time. Murshidabad Chhanabora has a high value of Springiness and Gumminess. In Food science, gumminess is a texture profile that combined hardness and cohesiveness.

The potable water from the ground water well of Murshidabad is nearly neutral in pH (7.17), very sweet in taste and with minimum amount of total dissolved solids and hardness. This water plays an important role while preparing the dough out of chhana and flour.

The smoothness of the dough is the key factor of the characteristic spongy inner portion of Murshidabad chhanabora. Small amount of water is sprinkled while preparing the dough. The purity of natural water with such little hardness imparts great taste and flavour to the end

product. Murshidabad Chhanabora is immersed in highly concentrated sugar syrup that secondarily contributes to better shelf life of end product.

G) Geographical area of Production and Map as shown in page no:

Historical evidences suggest Berhampore City is the actual birthplace of Chhanabora, though it is produced and marketed throughout the district Murshidabad.
Berhampore is the administrative headquarters of the Murshidabad district. It is located about 200 km (124 mi) from Kolkata, the state capital. Berhampore is located at 24.1°N 88.25°E.[4] It has an average elevation of 18 metres (59 feet).

The city is located approximately 200 km north of Kolkata by road at 24°4'N 88°9'E and is situated on the eastern side of the Bhagirathi River, a major distributary of the Ganges.

The District of Murshidabad has an area of 2143 sq. m. It is divided into two nearly equal portions by the Bhagirathi, the ancient channel of the Ganges. Murshidabad was a town and district of British India, in the Bengal Presidency. In the Mughal period it was the capital of Bengal. [Map enclosed]

Particulars of Berhampore:

Sl. No	Particulars	
1	District	Murshidabad
2	Latitude-longitude	24.1°N 88.25°E
4	Altitude	18 m (59 ft)

H) Proof of Origin (Historical records):

1. Mrs. J Halder has described the art and fame of Bengal Confectionary highlighting the special sweets of certain places in his book “Bengal Sweets” in the year of 1926.
   - Murshidabad Chhanabora is well mentioned here.
   - The recipes of the Chhanabora along with its ingredients are described here in details.

2. Pranab Roy has described the recipe of Chhanabora in his book “Banglar Khabar” (Publication year: 1987) and wrote that in “Chaitanyacharitamrita” Chhanabora is mentioned which suggest the presence of this unique sweet in ancient Bengal.
   Translation of highlighted portions of Banglar Khabar by Pranab Roy
   Chhanabora.
   Chhanabora is a famous sweet of Murshidabd City (Lalbagh), Berhampore and places of Murshidabad district. It is assumed that the sweet was originated in the regime of Nawab. Its reputation transcends the boundary of Bengal day by day. Chhanabora is mainly of one types- round shaped. Superior quality Chhana is mashed well and shaped in the form of round ball of sweet. Crushed cardamom is used as stuffing inside the sweet. These are now deep fried In Ghee in such a manner so that the outer surface of the sweet becomes reddish black in colour and the inner side become porous and spongy. After frying the sweets are immersed in sugar syrup and kept in it for some times. Once it becomes enough syrupy it is served.

   It is not known who had actually invented this sweet but it is there since ages. Nimai Mondal used to have a sweet shop at MurshidabadCity (Lalbag). Varieties of sweets were

being ordered at Nawab Palace from this shop. Nimai Mondal of Murshidabad City (Lalbagh) and Patal Ostad, Gopeswar Saha of Saidabad was one of the popular confectioners who used to make famous Chhanabora.

3. Documentation of Chhanabora in "Mistannapak" written by Bipradas Mukhopadhyay in 1898 (Page-146)

Translation of the highlighted portions

Preparation of Chhanabora is similar to that of Pantua preparation. Superior quality chhana is first pressed to drain out water. Flour is mixed with Chhana and dough is formed. For 1 kg Chhana about 300 gm flour is needed. Small round dumplings are made from the dough and those are fried in ghee until deep brown colour is obtained. Final step is immersion of the sweet in concentrated sugar syrup. Sometimes crushed sugar is spread of the final product that gives a toothsome texture to the sweet.

4. Documentation of Chhanabora under the segment of "Sweet Industry" of Murshidabad District Gazzetteer (2003)

The 8th chapter of this gazette describes about various industries of the district Murshidabad where sweet industry has been mentioned as one of the important one which gives the district a reputation to the world.
Invention of the unique sweet Chhanabora by the age old local confectioners of Murshidabad, how the sweet became a product of great demand-all these are well depicted under this segment.

Translation of the highlighted portions: (Page- 332)

Murshidabad district is famous for inventing different unique sweets. Chhanabora of Berhampore, Sponge Rasogolla of Islampur, Monohara of Beldanga are some of those unique sweets that reputed the district even outside Bengal.

More than 5000 people (approx.) are engaged in this sweet making industry. Though the actual fact of invention is not known but the age old confectioners are still practicing their excellence in making some unique delicacies since ages. Chhanabora is one of the sweets. Large sized Chhanabora had gained popularity as a gift to the eminent personnel. Rajiv Gandhi, Chancellor Kailashnath Katju were felicitated in the district with jumbo sized Chhanabora whose weight used to be 30kgs or even more. The method of preparation of this large size sweet is also unique. 8-10 confectioners jointly work together; the sweet is fried in pure ghee for about 2 days in lowest flame and then immersed in sugar syrup for another two days. Finally it gets ready to be served then. Nimai Mondal, Patal Ostad, Gopeswar Saha were one of the popular confectioners who used to make famous Chhanabora.

I) Method of Production:

Ingredients required- following are the main ingredient used to prepare 1 kg Murshidabad Chhanabora

- Chhana (1 kg),
- Whole wheat flour (130 gm),
- Sugar (150 gm),
- Cardamom (5 gm),

- Ghee

Method:

Preparing the dough:
Fresh quality chhana is required for making Murshidabad Chhanabora. At first fresh quality milk is boiled and curdled to prepare the chhana. After complete curdling of the milk, chhana is extracted out of whey and pressed further to eliminate excess water out of it.

Then a measured amount of hand milled whole wheat flour is mixed with the chhana and with intermittent sprinkling of required amount of water. A soft dough is prepared by a thorough kneading of the mixture. This kneading is done by hands only. Efficient kneading is a key factor for the desired texture development of Murshidabad Chhanabora. A small amount of ghee is used for shortening. After making the dough, approx. 7gms of crushed cardamoms are added for enhancing the flavor or aroma of the mix.

Preparing dumplings and frying:
Small round ball shaped dumplings are made out of the dough by hands which is a skillful process. Perfect balls of dough are made only when the compositions of the dough is perfect.

The proportions of ingredients, texture, binding of the dough are the base of preparation of Murshidabad Chhanabora.

The balls are then deep fried in fresh quality ghee till a deep brown colour appearance. It takes around 35-40 minutes to fry the sweets at low to high and finally at low flame. For Murshidabad Chhanabora, the frying is more intense and time and temperature variation (frying at low flame for 15 min followed by on a high flame for next 20 min and finally at low flame for another 10 min) make the product of desired texture. The inner portion of the Chhanabora should remain soft with development of hard fried outer crust of the sweet.

This specific dark brown, hard outer coating is the characteristics of 'Murshidabad Chhanabora' that makes the product unique from the rest.

Frying time and temperature details:

Frying time	Flame type
Initial frying at Low flame for 15 min	Low flame
Next 20 min frying continues	High flame
Final 10 min frying	Simmering (very low flame)

Immersion in sugar syrup:
After frying the chhanaboras are immersed in concentrated sugar syrup which is previously prepared using sugar and water. It tastes best when it is immersed for 24 hours, as the outer portion is hard, it takes time to absorb the syrup. Sugar syrup penetrates through the outer parts into the core and makes it soft. This soft internal core within a hard, crusty outer part is the speciality of Murshidabad Chhanabora. Chhanaboras tastes best when served cool.

J) Uniqueness:

Murshidabad Chhanabora is a distinctive and renowned Bengali sweet that originates from the Murshidabad district in West Bengal, specifically from Berhampur city. It stands out due to its unique preparation method, texture, and taste. The key features of this delicious sweet include:

Shape and Color:
Murshidabad Chhanabora is round and has a dark brownish-black outer crust. This outer layer is hard and crispy, contrasting with the soft, fluffy, and syrup-soaked interior that is juicy and delicate.

Texture and Taste:
The sweet is known for its unique dual-texture— a hard, crispy exterior and a soft, juicy interior. The exterior is created by deep frying at a constant low flame for an extended period, which results in the dark color and hard texture. The interior remains soft and fluffy, and when broken, the syrup oozes out, accompanied by a cobweb-like texture.

Ingredients and Preparation:
The main ingredients include chhana (Indian cottage cheese) and whole wheat flour, which gives it a distinctive texture not commonly seen in other sweets.

The dough is prepared using chhana, wheat flour, and water, with Murshidabad's soft, low TDS water playing a crucial role in achieving the smoothness of the dough and the final spongy texture. Murshidabad Chhanabora is immersed in a concentrated sugar syrup that soaks into the sweet, further enhancing its sweetness and juiciness.

Frying Process:
The frying process is a labor-intensive and skilled task that requires constant monitoring. The sweets are fried at low flame for hours, and occasionally, large-sized Chhanaboras weighing up to 1-2 kg are prepared by experienced confectioners. This requires mastery over the frying technique to ensure the perfect combination of crispy outer crust and soft interior.

Geographical and Environmental Factors:
The tropical climate and fertile soil of Murshidabad contribute to the quality of milk and chhana used in making the sweet. The region's grass-fed cattle produce high-quality milk, which is richer in protein and nutrients like calcium and vitamin A, which in turn improves the quality and taste of the chhana. The pure water with low TDS is essential for creating the smooth dough and ensuring the sweet's perfect texture.

Human Skill and Tradition:
The preparation of Murshidabad Chhanabora is a craft passed down through generations. Skilled sweetmakers follow traditional methods, and the entire process, from curdling the milk to kneading the chhana and frying, is done by hand without machinery. The long and careful frying process demands experience and expertise, and it is this craftsmanship that gives the sweet its distinctive quality.

Overall, Murshidabad Chhanabora is a unique sweet that stands out for its combination of traditional methods, local environmental influences, and the exceptional skills of the confectioners who prepare it.

K) Inspection Body:

Representatives of Department of Food Processing Industries and Horticulture, Govt. of West Bengal	Member
Representative from West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL)	Member

Director/Representatives, Directorate of MSME, Govt. of West Bengal	Member
Representative of Department of Science & Technology and Biotechnology, Govt. of West Bengal	Member
Representatives of Patent Information Centre, WBSCST, Govt. of West Bengal	Member
Representatives of District Magistrate Office, Murshidabad	Member
Representatives of Murshidabad District Chamber of Commerce & Industries	Member
Representatives of Food Processing Development Office, Murshidabad	Member
Representatives of Office for Development of Agriculture & Horticulture, Murshidabad	Member
Expert members from Academics/Industry/Line department	Member

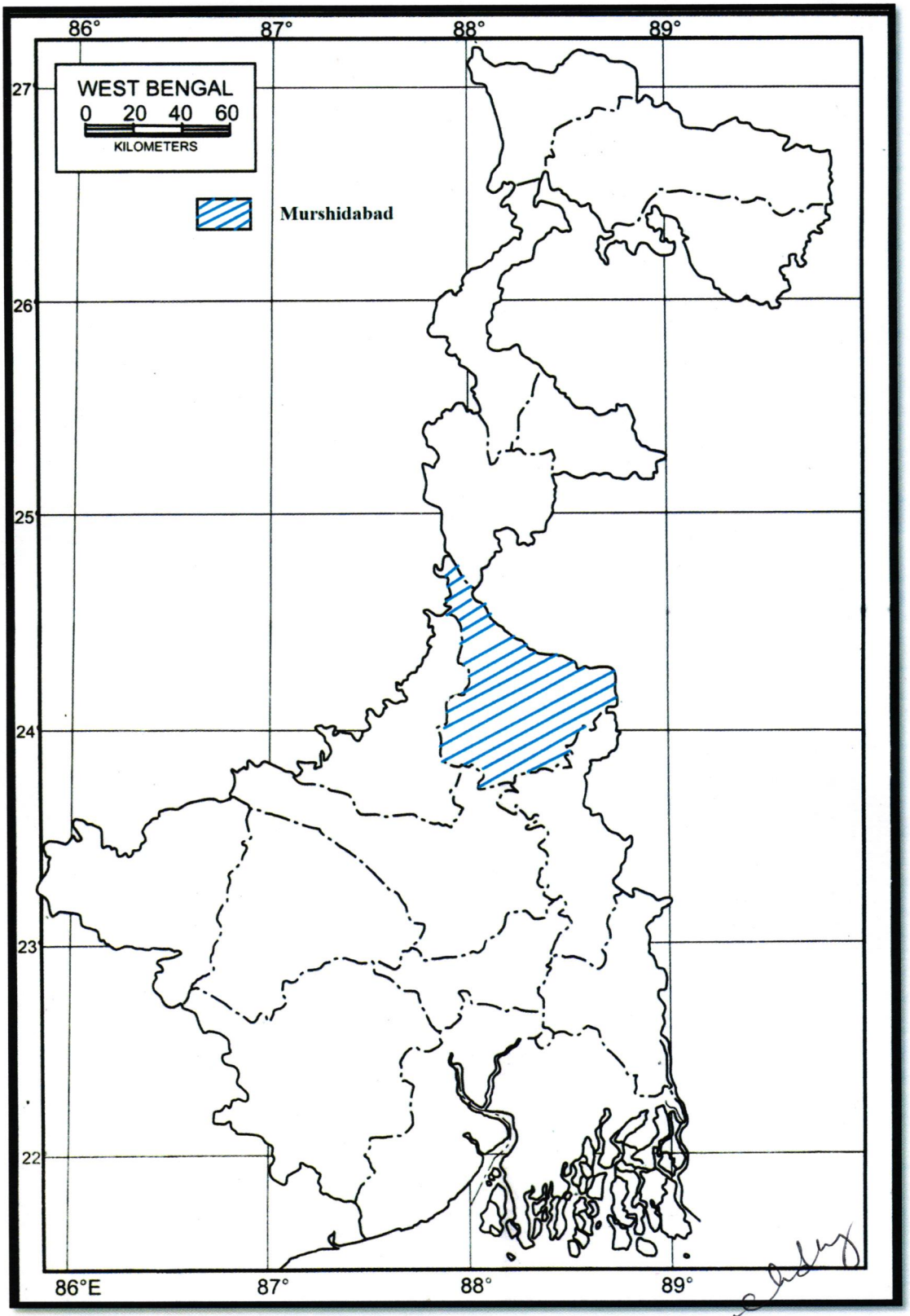
L) Others:

Socio economic profile

A huge number of people are engaged in this sweet making industry preparing Murshidabad Chhanabora in this area and earning by this means.

ANNEXURE – 1

Area of Production of Murshidabad Chhanabora



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Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1036

Application Date: 21-12-2022

Application is made by Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal) at 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India for Registration in Part - A of the Register of **Bishnupur Motichur Laddu** under Application No. 1036 in respect of Food Stuff – Sweet falling in Class – 30 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal)

B) Address : Mishti Udyog (Sweets & Savouries Entrepreneurs' Association of Bengal), 532, Rabindra Sarani, Bagbazar, District: Kolkata - 700 003, West Bengal, India

Facilitated By:

1. Patent Information Centre, West Bengal State Council of Science & Technology, DSTBT-GoWB
2. West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL) under Department of Food Processing Industries and Horticulture, Government of West Bengal

C) Name of the Geographical Indication :

BISHNUPUR MOTICHUR LADDU

D) Types of Goods : **Class 30** – Food Stuff - Sweet

E) Specification:

Bishnupur Motichur Laddu is a unique sweet that reputes its birth place since ages. The name Motichur is derived from 'Moti' means pearl and 'Chur' means tiny granules. As the name suggests, the Bishnupur Motichur laddu is made up of tiny pearl like beads or granules especially prepared.

- The main ingredient of Motichur Laddu is the Piyal seed flour. The seed, basically the embryo obtained from the seed of 'Piyal' tree (*Ficus religiosa*) is crushed to obtain the flour or besan, out of which the 'motichur' is prepared.
- Piyal seed flour is mixed with Benagl gram flour to prepare a smooth batter, which is then poured into hot oil through porous ladle to make the bundis for preparation of Bishnupur Motichur Laddu
- It is golden yellow in colour and round in shape.
- No extraneous colour is added
- It is moderate sweet in taste
- It has a special nutty flavour and characteristic chewy texture
- Piyal seed flour, the main ingredient of Bishnupur Motichur Laddu has antioxidant and medicinal property and thus is used in Ayurveda.
- Bishnupur Motichur laddu contains 243 ± 12 mg of Calcium and 145 ± 10 mg sodium per 100 gm

Chemical analysis of Bishnupur Motichur Laddu

Parameters	Result
Energy (kcal)	425.25 ± 25.5
Carbohydrate (%)	41.23 ± 10.5
Protein (%)	10.0 ± 2.0
Fat (%)	24 ± 1.8
Ash Content(%)	0.06 ± 0.04
Presence of Food Colour	Absent
Total Soluble Solid(%)	15.05 ± 3.5
Sucrose (%)	40 ± 3.8
Calcium (mg/100)	243 ± 12
Sodium (mg/100)	145 ± 10
Potassium (mg/100)	63 ± 8
Vitamin D(IU/100)	0 ± 8
Aerobic Plate Count in cfu/g	2.3 x 102 ± 1 x 102
Coliform in cfu/g	*<10*
E. Coli in cfu/g	*<10*

F) Description:

Bishnupur Motichur Laddu is a unique sweet that reputes its birth place since ages. The name Motichur is derived from 'Moti' means pearl and 'Chur' means tiny granules. As the name suggests, the Bishnupur Motichur laddu is made up of tiny pearl like beads or granules especially prepared.

The main ingredient of Motichur Laddu is the Piyal seed flour. The seed, basically the embryo obtained from the seed of 'Piyal' tree (*Ficus religiosa*) is crushed to obtain the flour or besan, out of which the motichur laddu is prepared.

This Piyal tree is exclusively grown in wide area of Bishnupur. Piyaldoba of Bishnupur is even named after the tree due to its abundance. The agro climatic condition of this area, the red soil favours natural plantation and growth of Piyal tree in these areas.

Piyal seed flour is mixed with Benagl gram flour to prepare a smooth batter, which is then poured into hot oil through porous ladle to make the bundis for preparation of Bishnupur

Motichur Laddu. The fried bundis are cooked in sugar syrup. The concentration of sugar syrup is a determining factor to the texture of the laddu.

Efficient human skill is required for making of Bishnupur Motichur Laddu. The process of shaping the laddu is done entirely by hands. For better and uniform binding the ratio of piyal seed flour and Bengal gram flour is very important to maintain.
The golden yellow colour, albeit sweet taste and unique flavour of the besan of piyal seed makes the sweet totally different from conventional besan laddu which is prepared from chhola or Bengal gram flour.

Due to the use of this unique ingredient, the taste of Bishnupur motichur laddu is way different from common Bengal gram flour laddu. It has a specific nutty flavour and particular texture and mouthfeel that makes the product distinct from the analogous sweet.

G) Geographical area of Production and Map as shown in page no:

The fame of this unique sweet is somewhat synonymous with Bishnupur. Bishnupur is a city and a municipality of Bankura district in the state of West Bengal, India. It is the headquarters of the Bishnupur subdivision

Sl. No	Particulars	
1	District	Bankura
2	Latitude-longitude	23.075°N 87.317°E
3	Altitude	59 m (194 ft)

H) Proof of Origin (Historical records):

Translation of extracted portion of the book 'Mallabhum Bishnupur' written by Manoranjan Chandra (Publication year: 2002). Bishnupur is said to be the 'Mallabhumi' based on the regime of Malla kings and since 1600 AD the sweet industry has evolved with a boom.

In a proverb it is being said that- 'Song, music and motichur, these three in Bishnupur'.

The term 'Motichur' means Mihidana i.e fine granules but it is totally different from the sweet named 'Mihidana'. Mihidana is prepared from Bengal gram flour whereas 'Motichur' is prepared from the flour of Piyal seed embryo. No colour is used in Motichur laddu. Rice flour is mixed with piyal seed flour in a particular proportion and a batter is prepared. The batter is poured on hot desi ghee through porous ladle and the fines droplets are fried at low flame. These are fried till a beautiful golden colour and then immersed in sugar syrup.

Moti meand pearl and Chur means granules thus Motichur means pearlbeads or granule of pearls. The golden fine motichur granules look like pearl and melts in mouth when tasted.

Krishnadas Kabiraj has mentioned about this Motichur Laddu in the name of 'Mouktikakshya Naru' in 'Gobinda Leelamrita'.

It is being mentioned that the confectioners of Nag family of Binshupur was famous for Motichur laddu preparation. The confectioners of this family is preparing this sweet since 6th long generations and dedicated these sweets as offering to the God and Goddess of Bishnupur.

Translation of extracted portion of the book 'Banglar Khabar' written by Pranab Roy in 1987

Here in this book the author has described different Bengali cuisine and mentioned the places famous for the food products.

'Motichur' – the word comes from Sanskrit word 'Mudgmodak'. The flour is mixed with water in the form of a batter and then the batter is passed through sieved ladle and fried in fresh ghee. The fried bundis are then immersed in sugar syrup and finally when they swell, the motichur is taken in hand and formed in a shape of laddu. Bishnupur is famous for Motichur Laddu.

I) Method of Production:

Ingredients:

- Flour of Piyal seeds
- Bengal gram flour
- Sunflower oil
- Sugar
- Milk
- Water
- Cashew and raisin for garnishing

Method:

Collection and dehusking of Piyal seed:

The piyal seeds are collected and dehusked mechanically. The inner part of the seed i.e the embryo part is collected and ground into flours. The piyal seed flour or besan is the base ingredient of the laddu. If the seeds are wet then it is thoroughly sun dried before grinding.

Preparation of the batter:

In next step the piyal seed flour is added with measured amount Bengal gram flour and mixed with water to make slurry like batter. The consistency of the batter should not be too thick or too watery.

Frying the mix:

Best quality white oil (sunflower oil) is used for frying. The oil is heated thoroughly and the batter is spread over traditional equipment named as 'Chhanta' (strainer type ladle). As the ladle is moved over the heated oil, the batter comes through the pores as drop by drop and falls into hot oil. The bead like besan granules are fried till a beautiful golden yellow colour.

Cooking in sugar syrup:

A sugar syrup is prepared with a medium consistency having sugar and water in it. A small quantity of milk is added to the syrup to purify the impurities. This traditional process makes the syrup clean and clear. The fried granules are cooked in this sugar syrup for almost 15-20 minutes. This makes the granules sweet, soft and syrupy.

Cooling and formation of the laddu:

The granules are collected from the syrup and then kept for cooling in big pan being spread and finally when it gets cold, the age old confectioners form the laddu out of the granules by giving a round shape to it. The process is entirely carried out by hands.

J) Uniqueness:

Bishnupur Motichur Laddu is a traditional sweet with a deep-rooted history, known for its unique flavor, texture, and health benefits. Originating from Bishnupur, this sweet is renowned for its meticulous preparation process and distinct characteristics.

Key Characteristics of Bishnupur Motichur Laddu:

Main Ingredients:

The primary ingredient is Piyal seed flour, derived from the embryo of the Piyal tree (Ficus religiosa), which is ground into flour. This gives the laddu a unique nutty flavor and nutritional benefits, such as antioxidant and medicinal properties, as recognized in Ayurveda.
The flour is combined with Bengal gram flour (besan) to create a smooth batter for the laddu.

Appearance and Taste:
Golden Yellow Color: The laddus are golden yellow and round in shape, with no added artificial colors.
Moderate Sweetness: The sweetness is balanced, not overly sugary, providing a satisfying taste.
Unique Texture: The laddu has a chewy mouthfeel, thanks to its springy and cohesive texture. This is different from other laddus made from different flours or ingredients.

Nutritional Benefits:
Each 100 grams of the laddu contains around 243 ± 12 mg of calcium and 145 ± 10 mg of sodium.
Due to the use of Piyal seed flour and Bengal gram flour, the laddu is a good source of protein, contributing to its nutritional value.

Preparation Process:
The preparation of Bishnupur Motichur Laddu is a labor-intensive process, requiring skilled human craftsmanship. Key steps include:

Flour Preparation:
The Piyal seed is harvested, and the embryo is ground to produce a fine flour. This process requires precision to achieve the right texture and flavor.

Batter Consistency:
The batter is a crucial part of the process, requiring expertise to get the perfect consistency. The ratio of Piyal seed flour to Bengal gram flour must be accurate to ensure the right texture and binding properties.

Frying Bundis:
The batter is poured through a special porous ladle into hot oil, forming tiny droplets that resemble pearl beads. The oil temperature must be just right for the droplets to form the signature "motichur" or tiny granules.

Shaping the Laddus:
Once the motichur is fried and cooled, the granules are pressed together by hand to form the round laddus. This shaping process is entirely manual, as no machinery is involved. Skilled hands ensure the laddus are uniformly sized and have the perfect binding.

Human Skill and Expertise:
The entire process, from flour preparation to shaping, requires great human skill and experience. The consistency of the batter, the correct oil temperature for frying, and the hand-pressing of the laddu are all crucial steps that rely on the maker's expertise.

Bishnupur Motichur Laddu is not just a sweet; it is a product of rich tradition, skill, and an intricate preparation process. The unique use of Piyal seed flour, the careful frying of bundis,

and the hand-pressing technique all contribute to the sweet's distinct character and nutritional benefits.

K) Inspection Body:

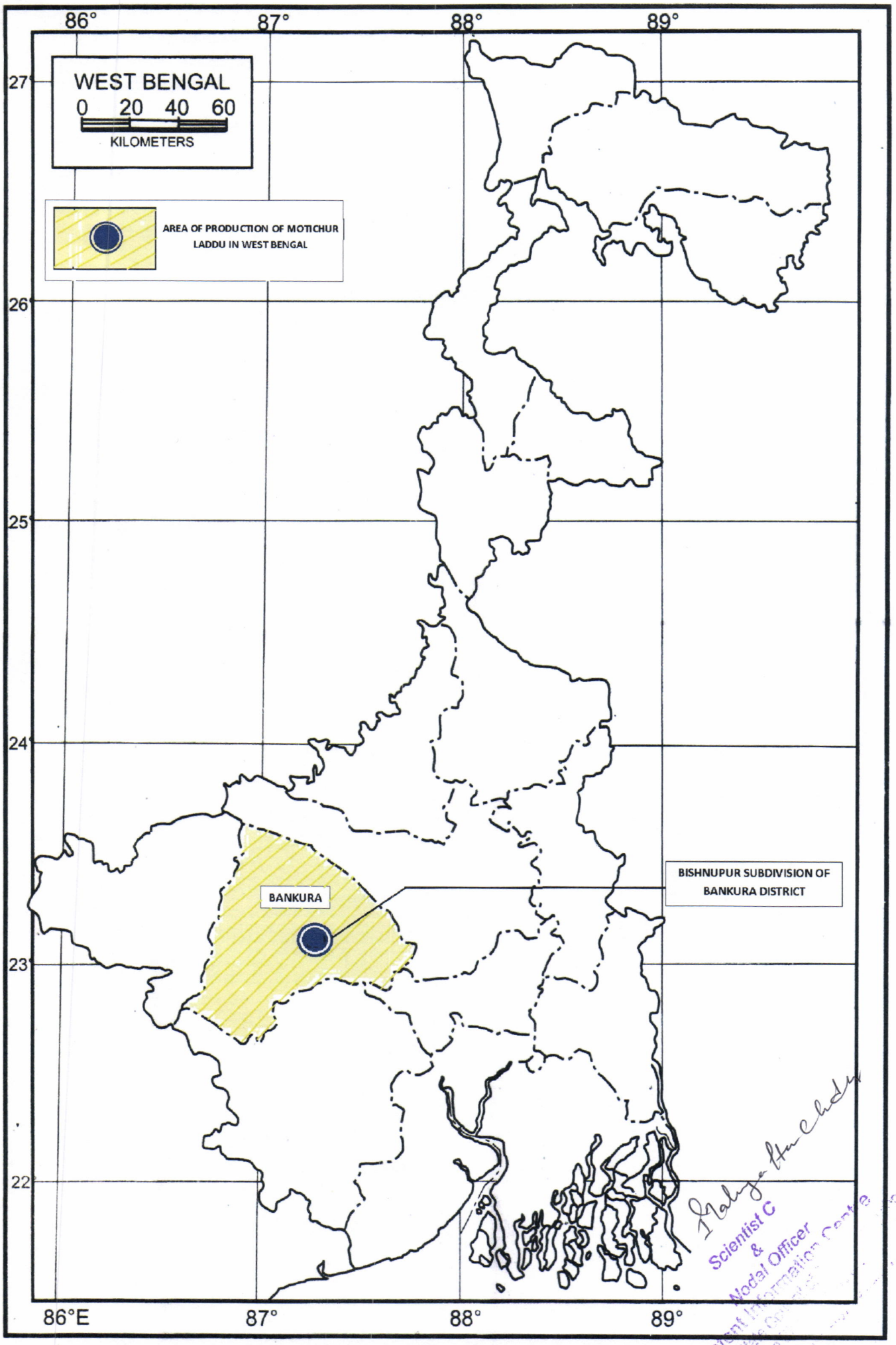
Representatives of Department of Food Processing Industries and Horticulture, Govt. of West Bengal	Member
Representative from West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL)	Member
Director/Representatives, Directorate of MSME, Govt. Of West Bengal	Member
Representative of Department of Science & Technology and Biotechnology, Govt. of West Bengal	Member
Representatives of Patent Information Centre, WBSCST, Govt. Of West Bengal	Member
Representatives of District Magistrate Office, Bankura	Member
Public Analyst (Food & Water), West Bengal Public Health Laboratory, Dept. Of Health and Family Welfare, Govt. Of West Bengal	Member
Expert members from Academics/Industry/Line department	Member

L) Others:

Socio economic profile

There are so many age-old confectioners in the area of Bishnupur, who are engaged in making this unique sweet in traditional way.

ANNEXURE - I



Scientist C & Nodal Officer

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1046
Application Date: 19-01-2023

Application is made by The Wirasat Handicrafts Industrial Cooperative Limited at Kashmir Haat (Exhibition Ground), Srinagar, Kashmir – 190 009, Jammu and Kashmir, India for Registration in Part - A of the Register of **Kashmir Chain Stitch** under Application No. 1046 in respect of Textiles and textile goods, bed and table covers; Clothing, footwear, headgear and Lace and embroidery falling in Class – 24, 25 & 26 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The Wirasat Handicrafts Industrial Cooperative Limited

B) Address : The Wirasat Handicrafts Industrial Cooperative Limited,
Kashmir Haat (Exhibition Ground), Srinagar, Kashmir – 190 009, Jammu and Kashmir, India

C) Name of the Geographical Indication :

KASHMIR CHAIN STITCH

D) Types of Goods : **Class 24**– Textiles and textile goods, bed and table covers
Class 25 – Clothing, footwear, headgear, &
Class 26 – Lace and embroidery

E) Specification:

Kashmir Chain Stitch is a traditional and intricate form of embroidery, celebrated for its precision and beauty, done using a hook called an aari (or aaer in local terms) on white hessian cloth. This detailed art form involves creating dense, continuous loops that follow a design outline, forming an embossed effect on the fabric. The fabric's background is fully covered with the chain stitch, making it more suitable for floor coverings, wall hangings, and smaller items like cushions and screen drapes.

The process begins with tracing a design—usually floral patterns, animals, human figures, or sometimes even abstract geometric shapes—onto the fabric. The embroidery is done with two-ply wool or sheeba silk yarn, creating a series of loops that rotate and connect to form the design. The embroidery itself becomes the primary visual feature, with the base cloth

disappearing beneath the dense stitching. This technique gives the fabric a texture akin to a carpet, without the pile.

The use of the hook (aari) in chain stitch makes it more efficient than needle-based embroidery, allowing the artisans to work faster and cover more surface area. The base fabric used is typically pre-shrunk, white cotton, chosen to be hidden completely under the threadwork. Once the embroidery is completed, the piece is washed and ironed to finish, ensuring a clean and polished look.

Kashmir Chain Stitch is particularly renowned for its floral motifs, but it also extends to reproductions of famous paintings and abstract designs, showcasing the creativity and cultural depth of the region. This embroidery is widely produced in Srinagar and Anantnag districts, where it has become a popular handicraft, especially among the middle class, due to its moderate pricing. The finished products often feature tassels called dashi and come in fixed sizes, making them desirable for various decorative uses.

This craft continues to thrive as one of Kashmir's most significant and cherished handicrafts, blending artistry with functionality, while also preserving the region's rich cultural heritage.

F) Description:

Chain stitch is one of the magnificent crafts of Kashmir which is scrupulously done on white hessian cloth with aari (hook). The embroidery is done all over the cloth base and the stitches are denser. The yarn used for the embroidery is either two ply wool or Sheeba silk. D. N. Saraf in his book, Arts and crafts; Jammu and Kashmir: land, people, culture, mentions that the Chain stitched rugs are a speciality of Kashmir. These rugs are finely embroidered all over in superior woollen yarn, entirely covering the hessian base. As the name suggests, the technique is that of acontinued stitch, not by the needle but by the hook. Embroidery is done over hessian and sometimes on hand woven cotton. Floral patterns, animal and human figures form the main designs. The designs are traced by the naqash while the embroiderers work in two ply woollen or Sheeba silk yarn. Around 6000 workers are engaged in this craft. Hessian based chain-stitch is also used for a variety of smaller articles as screen drapes, wall hangings and cushion covers.

Raw Material

The main raw materials used for doing chain stitch embroidery are fabric and thread. Traditionally, hessian cloth is used for the base. Hessian fabric is a woven fabric, usually made from the skin of the jute plant or sisal. It has historically been produced as a coarse fabric, but more recently it is being used for making bags, rugs and other products.9 T.M. Abraham in his book, Handicrafts In India, articulates that the base fabric for chain stitch is hessian cloth. Bags, cushion covers, screens and other articles adorned with chain stitches are attractively done using this base.

Thread

Chain stitch is done by using two ply woollen and Sheeba silk yarn. Traditionally two ply yarn is used for the embroidery as it is durable and gives the embroidery a neat and uncluttered look. Sheeba Silk also has a glow of silk and the softness of wool, giving the product a luxurious and sumptuous look.

Tool

Aari (Hook): Chain stitch is done with a peculiar kind of hook, known as aear in Kashmir. The needle is thick and has a small, bent tip. The hook catches the thread on the backside of the fabric, pulling it to the front side to create loops.

Technique

Chain stitch is a form of embroidery done mainly on rugs, cushion covers and tapestries. These rugs are finely embroidered all over in superior woollen yarn, entirely covering the hessian base. As the name suggests, the technique is that of a continued stitch, not by the needle but by the hook. The designs are traced by the naqash while the embroiderers work in two or three ply woollen yarn. Silk yarn is used sometimes. The ari is inserted through the cloth in the form of a loop and is finally pulled up through the surface of the cloth to form a stitch. The Chain stitch was also used for Gabbas and Numdahs, floor coverings used in homes.

Chain Stitch rugs ere the best possible substitutes for carpets and coordinate well with western-style interiors. Slowly, western influence mingled with existing patterns. The hook's point is always towards the right, and there is a mark made on the wooden handle. On this mark (which is always in the form of a slightly carved out portion), the thumb of the right hand is placed. The index finger extends to as much of the length of the stem of the hook as it can reach. Some mustard oil is applied to reduce the friction with the stem of the hook or they use a steel cover on the finger called thimble or nyath. The left hand is always under the cloth, and the hand holds the yarn. It encircles the hook with the yarn every time the former is pushed through the fabric. As the yarn is pulled slightly and held stretched beside the hook the latter is pulled up to the top of the cloth and through the previous loop. Thus, a series of loops are pulled to the surface, emerging from within the previous, forming a continuous long chain of loops that move along the design lines. The outlines are filled first then the motif after which the entire base is filled with embroidery. The craftsmen, both men and women, sit with their knees up and their backs against a wall and the fabric spread on their knees. A thimble called nyath is worn on the index finger of the right hand to protect it from the prick and to push the needle into the thick cloth. Families work together to complete the work while humming the folk songs of Kashmir. Artisans work with dedication and gratefulness for the craft they have acquired, passed on from generations to generations, their hearts synced with the hooked loops.

Designs

The adroitness of chain stitch embroidery is the salient part of Kashmiri arts and crafts. It is a technique in which continuous loops are created to form a design. Hessian cloth is used for the base, two ply yarn of wool or Sheba silk is used for embroidery. The embroidery is spread all over the fabric, the background is always in one single colour and consists of a number of concentric circles, each the size of a coin. The motifs and figures of the foreground are more brightly coloured. The motifs and designs are usually inspired from the stupendous landscape of Kashmir. Chain stitching done in Kashmir is different from the other parts of the world as it is done by hook (aari) and not by needle. Chain stitch embroidery is usually done on rugs, cushion cover, runners, and wall hangings.

G) Geographical area of Production and Map as shown in page no:

Srinagar- Latitude34.0837° N**, Longitude** 74.7973° E
Anantnag- Latitude 33o-20' to 34o-15' N, **Longitude** 74o-30' to 75o-35' E

The main locale for the craft of Chain stitch is Srinagar and Anantnag. Srinagar is a unique city with a rich living heritage, an ideal environment to study the impact of historical change on art, architecture and history. Its location in the middle of the valley of Kashmir, surrounded by

extremely high mountains, has allowed it to develop a unique culture of its own. The Valley is located at the crossroads of four very different civilizations, each of which had a tremendous impact on its local history. In Srinagar, it is practised in almost every part but mainly in the downtown area of the city. Downtown, popularly known as Shahar-e-Khaas, is the largest and the most densely populated area of the city of Srinagar in the Jammu and Kashmir. The area is mostly located on the banks of Jhelum river about five km (3.1 m) from the city centre15. The area is considered as the core point in the city as the first inhabitants of Srinagar lived there. In general, the whole area to the north of city centre Lal Chowk is considered a part of downtown although some areas hold high significance. The Jamia Masjid, Srinagar and many other shrines are located here, which makes it the central spiritual, religious, political and moral centre of whole Kashmir. The subdivisions of downtown include include Nawakdal, Raziya Kadal, Gojwara, Kawdoora, Saraf Kadal, Bohri Kadal, Nawa Kadal, Nayidkadal, Khanyar, Sekidafar, Ali Kadal, Habba Kadal, Fateh Kadal, Kani Kadal, Nawabazar, Tarabal, Khanqah e Mola, Hawal, Lalbazar, Hazratbal, Zadibal etc.

Dewan Parvez, in his book, The People & Culture Of J&K, mentions that crewel work is done and sold at the Bund, Dal Gate, Karan Nagar, Karfali Mohalla, Nawab Bazar, Nawa Kadal, Nayeed Kadal, Nowhatta, Safa Kadal, Tangpora Mohalla, Tarabal area of Srinagar. Anantnag District is in the southern sector of Jehlum Valley. It is because of its rejuvenating climate, the inspiring majesty, its lofty mountains, the melodious flow of sweet waters of its springs and streams, fertile soil, fragrant flowers and delicious fruits that the district has come to be synonymous with greatness.

It is also called the “land of countless springs”. The district is known for important monuments like Martand Temple (Sun Temple) at Mattan, Mughal Gardens of Achabal, Verinag and Padshahi Bagh (Dara Shiku Garden) at Bijbehara. The district has a fair number of shrines like the Shrine of Hazrat Zain-ud-Din Wali (R.A.) at Aishmuqam, Shrine of Baba Hyder Reshi (R.A.) in Anantnag town, Shrine of Naseeb-ud-Din Ghazi (R.A.) at Bijbehara and many others in different villages. The Anantnag Crewel and Chainstitch embroidery cluster is spread around Redwan, Lechipora, Batapora, Laizbal, Goner, Danter, Frisal, Yaripora, Wanpow, Qazigund, Duroo Shahabad, Mehendi Kadal, Bragaw, Anchidora, Sarnal Payeen, Sarnal Bala, Pehroo, Chak Anchidora, Aang, Mattipora, Chee, Rakhi Chee, Anzwala, Krangsoo, Paibugh & Mattan villages of District Anantnag. Apart from Srinagar and Anantnag district, the embroidery is also done in Baramulla, Budgam, Kupwara and Pulwama areas of Kashmir.

About Srinagar

Srinagar is the summer capital of Jammu and Kashmir and situated in the Kashmir region of the Indian subcontinent. The city lies along the banks of the Jhelum River at an elevation of 5,200 feet(1,600 meters) in the valley of Kashmir. Summer capital is situated in the center of Kashmir Valley and is surrounded by five districts.

Srinagar has the distinction of having a multifaceted and unique cultural blend, making it exclusive from the rest of the country, not only from the cultural forms and heritage, but from geographical, demographical, ethical, social entities, which forms a distinct spectrum of diversity. The city is the home to an extraordinary range of social, cultural and economic assets in its traditional knowledge systems, oral traditions, and in the skills of arts and crafts.6

The city has a rich living heritage and could be accessed by both land and water. It emerged as a trading post and developed into an urban center. The city was founded during the reign of Ashoka in 250 BC near Pandrethan, and the capital was shifted to the present site around Hari Parbat by Paravasena XI, in the sixth century, known as Parvapura at that time.

About Anantnag

Anantnag is situated around 30 miles (50 km) southeast from Srinagar, on the north of the Pir Panjal Range. Geographically the district lies between 33o-20' to 34o-15' north latitude and 74o-30' to 75o-35' east longitude. Anantnag is an agricultural trade centre and the southern headquarters for navigation of large boats in the Vale of Kashmir. Many springs flow from the land around the city, Anantnag claims the largest number of streams (Nallas) like Sandran, Brengi, Arpath and Lidder. The most important among these is Lidder which takes off from Sheshnag lake and irrigates the maximum area of the district. It is the third biggest city in Jammu and Kashmir after Srinagar and Jammu with a metropolitan agglomerate populace of 159,838 and civil cutoff populace of 109,433. In 2010 Anantnag was declared as a major City of Export with an absolute GDP of 3.7 billion $. The high GDP of Anantnag is because of the unified position and presence of a large number of troops and migrant workers in it. Anantnag has an essential position lying on the fundamental North-South Corridor Road and with the biggest number of tourist destinations, it is a monetary centre point of Kashmir Valley. (Adam Zeidan, Britannica)

Socio- cultural and economical significance of the craft.

The proficiency of Chain stitch is indigenous to Kashmir. This embroidery has developed into one of the most important crafts of Kashmir, which continued to flourish in spite of political unrest, and are exported to many parts of the world to be used as rugs, wall hangings, runners and more.

The skill and techniques for the chain stitch embroidery have been learned by the new generation from the old generation. There are thousands of people involved in the adroitness of this craft. It is the main source of livelihood for many families. It provides financial support to a lot of families, and also funds their marriages, Pilgrims, construction, education etc. Women involved in this craft took up this art for disporting themselves from their hectic schedule. Many women do this because they can earn money without leaving home and help their families run the house. A group of people work together on rugs and complete their work while humming the folk songs of Kashmir.

It has a massive local market as gazillions of people have an ardourness to have a product emblazoned with chain stitch embroidery at their house. It holds a significant share in the overall production and export of the Union Territory. Handicrafts sector creates the highest percentage of employment with 33.12% of chain stitch and Crewel. According to the research done in 2017, it has been observed that the chain stitch and crewel are the highest contributors of the export (35.97%) in the handicrafts department.

H) Proof of Origin (Historical records):

Origin and History

Chain stitch is one of the finest and the traditional forms of embroidery in Kashmir. The origin of chain stitch is unsubstantiated but is thought to have originated in Asia Minor and brought to Kashmir by Turkish tradesmen during sultan Zain-ul-Abidin's rule.

Embroidered garments and furnishings were considered a status symbol in Muslim societies and often exchanged as gifts between dignitaries. In the Victoria and Albert Museum's collection a hanging of fine chain stitch embroidery made by professional male embroiderers dates from around 1700. The hook work embroidery style has become well established in Kashmir and is worked on a great variety of textiles including wool patterns on felt rugs (namdas) and furnishing fabrics. (Deborah Emmett)

Another part of the history of this exquisite craft articulates that the origin of the craft dates back to the early twentieth century, D. N Saraf in his book, Arts and crafts; Jammu and Kashmir: land, people, culture endorses that the chain stitch embroidery was introduced in Kashmir in the early twentieth century. The Chain stitch rugs are finely embroidered all over in superior woolen yarn, entirely covering the hessian base.

Documentation- Historical references in books

Historical References in Books

Emmett, D., 2018. The embroidery artisans of the Kashmir Valley: cultural imports and exports from historical and contemporary perspectives. The arrival in Kashmir of the crewel and chain stitch or zalakdozi craft is unsubstantiated but is thought to have originated in Asia Minor and brought to Kashmir by Turkish tradesmen during sultan Zain-ul-Abidin's rule. Embroidered garments and furnishings were considered a status symbol in Muslim societies and often exchanged as gifts between dignitaries. Chain stitch was also to be found in the western side of India, notably the Mochi embroiderers of Gujarat. In the Victoria and Albert Museum's collection a hanging of fine chain stitch embroidery made by professional male embroiderers of the Mochi community dates from around 1700. It worked with both a hook, called an ari, and a needle. Originally developed for embroidering on leather, for items such as belts, floor-coverings and shoes, the ari-work was adapted for use on cloth, and soon attracted the attention of western travellers to Gujarat. The East India Company exported these embroideries from the port of Cambay. Trade routes from Central and East Asia, as previously mentioned, crossed through the Kashmir Valley so it is possible the embroidery craft was also linked to the work done in Gujarat. Imported Asian influenced motifs visible in both crewel and chain stitch from Kashmir and Gujarat became popular in Britain on embroidered cloth that was exported by the East India Company in the 1700s. Likewise the felt rugs or namdas handcrafted in Kashmir are thought to have originated in Central Asia, the felt-making technique practised there by nomadic groups for centuries. Just as textiles were exported from Kashmir it seems influences from other cultures on the embroidery crafts came to Kashmir resulting from trade.

Dewan.Parvez, The People & Culture Of J&K, Manas Publication, New Delhi, 2011 Dewan Parvez, in his book, The People & Culture Of J&K, mentions that the craft is not very old. It was invented after gabbas were. Therefore, at most it must have started in the first half of the 19th century.

Gaatha-Chain Stitch

Before the 19th century plain Namda was mainly produced in Ladakh and were brought from Central Asia for embroidery in Kashmir. In 1420 it was during the time of Sultan Zain-u-labdin when the embroidered Namda industry flourished in Kashmir. For these rugs local wool was used. It was in 1850 that Las Khan from Kabul settled his first workshop in Srinagar. The craft later flourished in other parts of the city and the area was named Namdagari Muhalla.

D. N Saraf-1987,Page no: 93-94] From the accounts in the book by DN Saraf 'Arts and Crafts, Jammu and Kashmir' one can state that Crewel -chain stitch embroidery was a peculiarity of Kashmir as felted Namda we imported to Kashmir for embroidery. The book states that the estimated number for the plain 'namdas' imported into Kashmîr every year till 1940 were around 2,00,000. They were mostly embroidered with Crewel.

Emmett, D., 2018. The embroidery artisans of the Kashmir Valley: cultural imports and exports from historical and contemporary perspectives. The Kashmir Valley has continuously been occupied by foreign rulers for centuries, while causing hardships the influence of these rulers on Kashmiri textile crafts is well recognized. Initially Zain-UlAbidin, the

eighth sultan of Kashmir (1420-70) brought shawl and carpet weavers to Kashmir from Turkestan and Samarkand respectively. As a young prince he brought with him many artisans from Central Asia and it is thought craftsmen introduced zalakdozi (crewel and chain stitch) hook work embroidery to the Kashmir Valley during his rule.

General Historical Development of the Craft Over Time

Chain Stitch embroidery is one of the most promising and growing handicrafts items of Kashmir. The goods are available as rugs, wall hangings, tablecloths, cushion covers etc. Though this art is not as old as other crafts of Kashmir, it has gained tremendous popularity and its production has displayed an increasing trend over the years.

In typical Chain Stitch Embroidery the patterns are usually concentric circles filling the fabric and giving it an embossed look. Over the years, the craft has been through many changes. The motif language and design direction have changed in many ways. Chain stitch artisans have adapted a more modern approach, artisans re-create the abstract paintings and mainly create a scene depicting some story other than the basic flora, fauna and geometry providing a fresh look to the craft. Many products have been added to the product range, significantly increasing the market for Chain stitch embroidery. The Chain stitch embroidery in earlier times was done only with wool but later on many other yarns like silk were involved in the embroidery.

I) Method of Production:

Raw Materials

Fabric

Traditionally hessian cloth is used for the base. Hessian fabric is a woven fabric, usually made from the skin of the jute plant or sisal. It has historically been produced as a coarse fabric, but more recently it is being used for making bags, rugs and other products.

Thread

Chain stitch embroidery is done with two-ply wool yarn or sheeba silk yarn. Traditionally two ply yarn is used for the embroidery as it is durable and gives the embroidery a neat and uncluttered look. Nowadays, single ply woollen yarn is also used which is lower in cost. Due to which the consumer reach increases

Tools

Tracing paper

It is used to draw the basic design layout. It is sourced locally and is available inrolls.

Needle for pricking the tracing paper

Sewing needle is used to make holes in the tracing paper.

Ink

The ink used for tracing is the mixture of black ink powder and kerosine oil.

Aari (Hook)

Chain stitch embroidery is done with a peculiar kind of hook, known as aear in Kashmir. The needle is thick and has a small, bent tip. The thread is passed through the ari, hooked needle, and is always held under the fabric to be embroidered and the hook is used to pull a series of loops, each emerging from within the previous, to the surface of the fabric

Neyuth (thimble)
A thimble is a small pitted cup worn on the finger that protects it from being pricked or poked by a hook. Thimbles are usually made from metal, leather, rubber, and wood. Chain stitch artisans use metal thimble.

Production Process

Base Fabric selection

Fabric selection is the first step of Chain Stitch Embroidery, and the base is typically white or off-white coarse cotton.Fabrics that chain stitching is done on include cotton, dosuti, hand woven cloths, silk and wool22. The traditionally used material is cotton. Technique of Chain stitch Embroidery is also done on rugs like Namda and Gabba, so sometimes the base for embroidery may be the stitched Gabba or felted Namda.The fabric selection includes the sourcing of fabric from the local markets of Srinagar or sometimes the fabric is provided by the buyer or consumer.

The rug looks like a carpet which is mostly in 2x3, 3x5, 6x4, 6x9 and 9x12 feet. For cushion cover and other merchandise the dimensions may vary from design to design.

Preparing the Fabric

Once the fabric is selected and sourced, it is prepared for embroidery. The white colored fabric used traditionally for this embroidery is first washed and ironed to get an even surface on the fabric and also to avoid any shrinkage in future. Other steps involve cutting, stitching and finishing the raw edges, which is done manually.

Drawing and Pricking
The role of naqaash is significant in Chain stitch embroidery. Designs are drawn on tracing paper with the help of pencils by a traditional designer known as Naqash, Naqaash designs the basic layout of embroidery and draws the designs from scratch according to the requirement of the client or embroiderer. Apart from floral patterns, animals and human figures form the main designs. The patterns are usually linear abstractions of the local flora. Most of the motifs used are inspired by the splendid nature of Kashmir. However, sometimes the patterns can be geometric. They are drawn on cloth with the help of paper stencils. The naqaash draws the designs on tracing sheets, bought in rolls, which are then reused, as the motif bank in most products is the same. After the drawing is complete, the traced lines are permanently defined by being pricked through with a small needle. The naqaash pokes small holes into the sheet according to the motif lines. This step is known as pricking. Pricking is done with the help of a needle tool which is self-made by the naqaash. A pricking tool is usually an old pen with a needle attached at the tip with thread or tape. Common motifs drawn are:

- Guli Lala-Tulip
- Pamposh-Lotus
- Kilim design
- Turkish Afghan Strips
- Dreaenz-daar
- Booni-Chinar
- Dooni-Walnut
- Hassi-Border
- Poosh-Flower
- Raat Mangul-Owl
- Ruskat-Deer
- Batakh-Duck
- Hous-Elephant
- Seeh-Lion
- Ounth-Camel
- Badum-paisley
- Yemberzal-hyacinth
- Daenposh-pomegranate
- Sosan-iris
- Dachh-grapevine
- Poskar- Floral design
- Janwardaar- animal figures

Tracing on Base Fabric

Design tracing of the pattern on base fabric is done by the naqaash only. The base fabric is spread on the pattern table for tracing, and the tracing sheet is placed on the top. The ink used for tracing is the essential black ink powder mixed with kerosine oil, and this ink is not washable. Some naqash use washable ink pens and directly draw the pattern on the base fabric.The design gets printed on the fabric as liquid penetrates through the holes and transfers the outline of the design on the underneath cloth. Traditionally, designs for embroidery were printed with wooden blocks, but now tracing paper or opaque sheets of lacquered polyester are used. The designs are traced on to these sheets and the lines of the design perforated. These sheets are placed on the fabric and black soot-like powder mixed with kerosene is rubbed through the perforations due to the fabric. In most cases the designer and the tracer are the same person. The design is printed on the fabric at the block makers, with wood and metal blocks. Crewel work designs are much larger than other embroidered fabrics.

Selection of Yarn and Colours

The selection of yarn is done according to the design. The colour selection is an essential part as the piece is embroidered all over and embroidery covers the base. Over the years the colour scheme has changed a lot due to the preference of different colours with the changing trends.

The two-ply yarn is either sourced directly from the market or is dyed according to the requirement of the design. For dyeing the yarn is sent to the local dyers nearby. Dyer (locally called Rangur) boils water and adds colours in it, then the yarn is dipped in the prepared colour, and constantly matched with the sample provided. The yarn used for crewel and chain stitch is usually brought from outside the state. A two-ply woollen or sheeba silk yarn is mostly used for this type of embroidery. The finer wool gives these fabrics a more neat and uncluttered appearance in comparison

Embroidery

The embroidery on the traced designs is done by a traditional embroiderer known as Jalagdooz. Two types of crochet hooks are used for this embroidery. A smaller and narrower hook is used for chain stitch and fine quality Chain stitch work. The same embroidery stitch is used for both crewel and chain stitch but in crewel work the fabric shows around the embroidered Designs. For Chain stitch two-ply good quality wool is used and the threads are pulled tight. On the back of the fabric the stitches look neat, almost machine made. The other crochet hook is larger and thicker. The design is made in such a manner that if one stitch is opened whole of embroidery will come off.

Chain stitch embroidery differs from crewel work in that it covers the entire surface of the fabric. This makes the stitches very dense. After the actual pattern or design has been embroidered, the ground is filled with a characteristic circular movement in the same chainstitch. This makes the fabric much heavier and suitable for floor covering or wall hangings. The base fabric is usually canvas or thickly woven cotton cloth with good quality wool used for the embroidery. The chain stitch is also used to embroider namdas traditional Kashmiri floor coverings made from felt.

In every type of hook work embroidery, the hook is held under the fabric to be embroidered. It is pushed up along the lines of the design and pulled back with the vam on top of the fabric forming a continuous long chain of loops which move along the lines of the design. The hook's point is always towards the right, and there is a mark made on the wooden handle. On this

mark (which is always in the form of a slightly carved out portion), the thumb of the right hand is placed. The index finger extends to as much of the length of the stem of the hook as it can reach. Some mustard oil is applied to reduce the friction with the stem of the hook or they use a leather cover on the finger called thimble or nyath. The left hand is always under the cloth, and the hand holds the yarn. It encircles the hook with the yarn every time the former is pushed through the fabric. As the yarn is pulled slightly and held stretched beside the hook the latter is pulled up to the top of the cloth and through the previous loop. Thus, a series of loops are pulled to the surface, emerging from within the previous, forming a continuous long chain of loops that move along the design lines.

The craftsmen, both men and women, sit with their knees up and their backs against a wall and the fabric spread on their knees. A thimble called nyath is worn on the index finger of the right hand to protect it from the prick and to push the needle into the thick cloth. Families work together to complete the work while humming the folk songs of Kashmir. Artisans work with dedication and gratefulness for the craft they have acquired, passed on from generations to generations, their hearts synced with the hooked loops.

Final Fringing
At this stage any extra thread which is visible on the work piece is cut to give it a cleaner look.

Washing
Once a fabric is embroidered, it is sent for washing to remove all traces of dirt and stains it may have accumulated during the embroidery work. After finishing the piece is sent for washing to the local washerman (doub or dhobi). The washerman are situated in the Alikadal area of srinagar and for other districts each cluster has its specific washerman. After washing the final piece it is left to dry for several days, depending on the weather. The drying process may take a day.

Ironing
Before sending the piece back to the vendor it is ironed with hands or by large steam irons. The fabric is steam ironed in a rotary steam iron (material goes in full width) that results in a nice crease-free fabric ready to use. Large steam irons are mainly used for fabric that is of bigger dimensions. The machine is known as a calendering machine which has larger rollers that steam iron the final piece. Earlier ironing was done manually later machinery made things easy. After ironing the piece is sent back to the vendor where it is packed according to the market.

Final Product
Chain stitch is one of the magnificent crafts of Kashmir. It is a form of embroidery in which a series of loops are created to form a design. The base fabric is a white hessian cloth and the embroidery is done with a specialised type of tool called aari (hook). The thread used is a two ply wool or Sheba silk yarn. The hook is held under the fabric to be embroidered. It is pushed up along the lines of the design and pulled back forming a continuous long series loop. The embroidery entirely covers the whole base fabric, the background is always in one single colour and consists of a number of concentric circles. The motifs and figures of the foreground are more brightly coloured. Motifs used in Chain stitch are mainly inspired by the astounding landscape of Kashmir and some of the prominent motifs are Guli Lala (tulip), pamposh (lotus), Kilim design, Badum (Paisley), Booni (Chinar), dooni(walnut) etc. Chain stitch embroidery is chiefly done on rugs, cushion covers, runners, wall hangings and on accessories like bags and clutches

Designs & Description of Quality

Chain stitch rugs are a recent addition to the variety of floor covering, it is believed to be introduced in the early twentieth century and is considered as a speciality of Kashmiri. The craft is very sculpturous, which is done using the ari (hook) in the technique of the continuous creation of loops on a hessian base. The designs are developed by the naqash while the embroidery is executed by the jalakdooz using two-ply wool or silk yarns. Further, florals and animal motifs form the main design of these rugs covering the base fabric entirely. Apart from that, other furnishing articles such as cushion covers, curtains and drapes are made in various sizes as coordinates using the same technique.

Chain Stitch Embroidery has a wide range of designs, The motifs inspired by the sumptuous landscapes of Kashmir are the most prominent and famous design used in Chain stitch embroidery. Some of the prominent embroidery designs are Turkish Afghan Strips, BooniChinar, Dooni-Walnut, Hassi, Poosh, Raat Mangul, Ruskat, Batakh, Hous, Shah etc. Chain stitch Work is a variant of Aari Kari done exactly with the same hook work technique; the only difference is that the hook needle used in Chain stitch is thicker which is locally known as aari. Another difference is the thread used in crewel or chain stitch; it is generally a much thicker thread of either wool or silk to get that bold embellishing effect.

Chain stitch or crewel embroidery is usually done in upholstery and drapery fabrics, like curtains, cushion covers, and on accessories like bags and clutches. The designs of Chainstitch Embroidery are chiefly used for rugs and tapestries. There is absolutely no fabric patch visible in the Chain Stitch.

The designs of Chain stitch depend upon the size and the type of inspiration for the embroidery. Each piece is adorned with a different embroidery pattern and the colour palette varies from design to design. The background is filled with concentric circles created by the loops each and every motif stands out. The craft is not only preferred by locals but widely accepted by other parts of the world. The artisans have developed a range that caters every class of the society, which makes the craft available to all masses. Chain stitch artisans are large in number with more than 12000 active artisans located in the Srinagar city only. Artisans are open to experimenting with the style of inspiration according to the changing trend. With no specific quality parameters for Chain stitch embroidery, the quality wholly depends on the type of yarn used for embroidery, fabric and the design intricacy.

J) Uniqueness:

Kashmir Chain Stitch embroidery is a distinctive and intricate form of surface embroidery, known for its dense, decorative loops created using a specialized hook, locally called an aari. This technique involves stitching a continuous series of loops with two-ply wool or sheeba yarn, following the outline of a design that is first traced onto the base fabric. The embroidery not only outlines the design but also fills in the background with concentric circular loops, making the fabric heavy and suitable for applications like rugs, wall hangings, and cushion covers.

The process begins by printing the design onto the fabric using wood and metal blocks, a technique known for its precision in Kashmir. The base material used is typically thickly woven cotton, canvas, or hessian cloth, ensuring durability and providing the ideal surface for the dense embroidery. Once the design is printed, artisans use the aari to create the chain stitch, moving the hook along the design lines and pulling the yarn through to form a long chain of loops. These loops are worked in a circular pattern, filling the entire surface of the fabric and creating a stunning, textured effect.

Chain stitch embroidery in Kashmir is a traditional skill passed down through generations, and it is still primarily hand-done by artisans in the region. This craft is not limited to just large items like rugs or wall hangings but is also applied to accessories such as bags and clutches. The painstaking technique and the cultural heritage behind Kashmir Chain Stitch make it a precious form of embroidery, reflecting both the creativity and the craftsmanship of the artisans.
The uniqueness of Kashmir Chain Stitch lies in its intricate technique, rich cultural heritage, and the combination of local materials, making it one of the most distinctive forms of embroidery. Here are some of the key aspects that make Kashmir Chain Stitch truly unique:

Distinctive Hook Technique (Aari)
The embroidery is done using a specialized hook, called aari, which is unique to the region. This tool allows artisans to create continuous loops that form the chain stitch, a method that is faster and more efficient than traditional needle embroidery. The hook is pushed through the fabric and pulled back with the yarn to create intricate loops, giving the fabric a textured and embossed appearance.

Dense and Continuous Stitches
Unlike many other forms of embroidery, Kashmir Chain Stitch completely covers the surface of the fabric. The design is not just outlined but also filled with dense, concentric loops. This creates a rich, textured effect, and makes the fabric heavier, making it ideal for durable items such as rugs, wall hangings, and floor coverings.

Cultural Significance and Artistic Expression
The designs used in Kashmir Chain Stitch are often deeply connected to the local culture, with floral patterns, abstract motifs, and representations of local animals and humans being commonly used. Some pieces even reproduce famous paintings. These designs, typically linear abstractions of nature, reflect the region's rich cultural and artistic heritage, blending traditional motifs with creative expression.

Use of Local, High-Quality Materials
The two-ply wool or sheeba yarn used in Kashmir Chain Stitch is locally sourced and dyed, contributing to the unique texture and vibrancy of the embroidery. The base fabric is typically hessian cloth, canvas, or thick cotton, all of which provide a strong foundation for the intricate stitching and allow the design to be fully realized.

Intricate and Concentric Chains of Loops
The defining feature of this embroidery is the concentric circular movement of the chain stitches. The loops are meticulously placed to form continuous chains that fill in the design, creating a mesmerizing and unique visual texture. These loops, when completed, cover the base fabric completely, making the underlying fabric invisible.

Efficiency and Skill of Artisans
The use of the aari allows the artisans to work more quickly than traditional needle-based methods. However, despite this efficiency, the craftsmanship required is still extremely meticulous and skillful, and the craft is passed down from one generation to another, making it a cherished tradition in Kashmir.

Versatility of Applications
Kashmir Chain Stitch is not limited to any single type of product. While it is traditionally used for rugs, tapestries, and wall hangings, it is also applied to smaller articles like cushion covers,

bags, and clutches. The versatility of this embroidery allows it to fit into both decorative and functional items.

Sustainability and Local Economy
The craft supports several small local industries in Kashmir, including dyeing, yarn sourcing, fabric weaving, and the embroidery itself. These industries contribute to the region's economy while maintaining sustainable practices by using locally sourced materials.

The uniqueness of Kashmir Chain Stitch lies in its combination of traditional techniques, local materials, and intricate design work, all of which make it a highly valued and distinctive form of embroidery that reflects the artistry and cultural heritage of Kashmir.

K) Inspection Body:

The proposed structure of inspection and implementation of the GI:

- One representative from Development Commissioner Handicrafts, Ministry of Textile, Government of India
- One representative from Directorate of Handicrafts and Handloom, Kashmir
- One representative from Craft Development Institute, Srinagar
- One representative from Indian Institute of Carpet Technology (IICT)
- One representative from The Wirasat Industrial Handicrafts Cooperation Ltd(Crewel and Chain-stitch Manufactures Exporters Association).

L) Others:

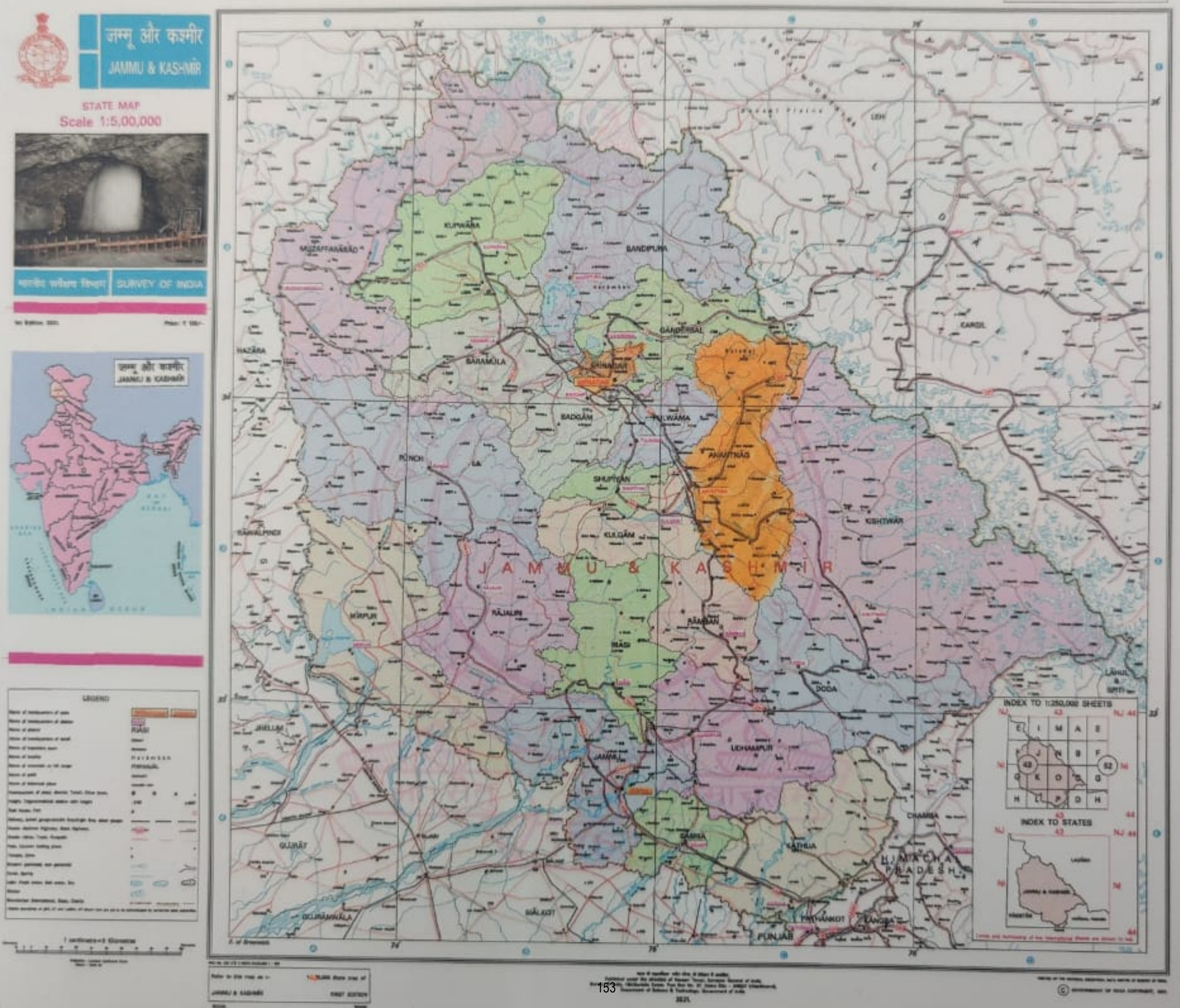
Chain stitch embroidery is a decorative form of surface embroidery which is done using two-ply wool or sheeba silk yarn and a series of loops are created to follow a design outline applied to the fabric. As the name suggests, the technique is a continued stitch, not by the needle but by the aari (hook). Embroidery is done over hessian cloth and sometimes on handwoven cotton. There is an additional lining of gunny cloth in some pieces, which improves its lasting quality.

Natively known as “Jalakdozi”, chain stitch rugs are the speciality of Kashmir. Kashmiri Handmade Rugs done in the chain stitch pattern are unparalleled brilliance, and the product range created is mainly a floor covering. The Chain stitch patterned rugs are in great demand worldwide because of the high quality of the embroidery. These exquisite art pieces are also used as wall hangings to impart an artistic appeal to the walls. As beautiful and impressive as these rugs look, the process undertaken to finish them is equally appealing. The white-coloured fabric used traditionally for this embroidery is washed and ironed to get an even surface on the fabric and avoid any shrinkage in the future.

Kashmir Chain stitch is a cardinal part of Kashmiri heritage, and is used for embellishing rugs, cushion covers, runners and wall hangings. It is a very important part of the Kashmiri handicrafts section and has a vast market. It is famous worldwide. It is practised in almost every district of Kashmir. This skill is mostly passed through generations. There are umpteen number of people involved in this craft, and thousands of families are dependent on it for livelihood. There are around 12,000 registered chain stitch and crewel artisans in Srinagar and in Anantnag there are around 3000 artisans working in the cluster out of which around 2000 men

and 1000 women. There are around 250 units with each unit comprising 3-4 artisans besides approximately.

FOR KASHMIR CHAINSTITCH



- ANANTNAG
- SRINAGAR.

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1047
Application Date: 19-01-2023

Application is made by The Wirasat Handicrafts Industrial Cooperative Limited at Kashmir Haat (Exhibition Ground), Srinagar, Kashmir-190 009, Jammu and Kashmir, India for Registration in Part - A of the Register of **Kashmir Crewel** under Application No. 1047 in respect of falling in Class – 24, 25 & 26 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The Wirasat Handicrafts Industrial Cooperative Limited

B) Address : The Wirasat Handicrafts Industrial Cooperative Limited,
Kashmir Haat (Exhibition Ground), Srinagar, Kashmir-190 009, Jammu and Kashmir, India

C) Name of the Geographical Indication :

KASHMIR CREWEL

D) Types of Goods : **Class 24 -** Textiles and textile goods, bed and table covers.
Class 25 - Clothing, footwear, headgear
Class 26 - Lace and embroidery.
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E) Specification:

Kashmir Crewel is a traditional form of embroidery that is known for its intricate and bold surface embellishments using woolen yarns. Originating in Kashmir, this art form has a rich heritage and is recognized for its beautiful and detailed designs. Here's a more detailed breakdown of this unique embroidery technique:

Origins and Terminology:
The term "Crewel" comes from the words "Krua" or "Clew," meaning a ball of yarn. It refers to the woolen threads used in the process. The technique is done with a pointed hook called aari, a needle-like tool that is used to create various stitches on the fabric.

Technique and Materials:
Crewel embroidery is typically worked on unbleached, natural fabric known as dosooti. The stitches are done in a way that they do not fully cover the background, leaving gaps that enhance the contrast between the design and the fabric. The embroidery uses a single-ply wool

that results in a textured, bold appearance. The stitchwork creates a continuous long chain of loops, forming designs that stand out from the fabric.

Design and Motifs:
The motifs used in Crewel embroidery are often floral, derived from the local flora of Kashmir, though they can also include animal and human figures. The designs are usually linear and abstract, capturing the essence of the subjects in a stylized way. Geometric patterns can also be used, but floral designs are the most common. These motifs are usually traced on the fabric by a skilled artist known as the naqaash before the embroidery begins.

Purpose and Usage:
Crewel embroidery is mainly used for large pieces of fabric that are later cut into smaller shapes as needed. The finished products are often household items such as curtains, cushion covers, bed covers, and upholstery. The rich texture and intricate designs make these items both functional and ornamental, enhancing the aesthetic appeal of any space.

Post-Embroidery Process:
After the embroidery is completed, the fabric is washed and ironed to give it a polished finish. This step ensures that the threads settle properly and the design looks clean and crisp.

Cultural Significance:
Crewel embroidery is deeply tied to Kashmiri culture and craftsmanship, representing the region's rich artistic heritage. It not only serves as a method of decoration but also as a way to express the natural beauty of Kashmir through the hands of skilled artisans.

Kashmir Crewel is not just an embroidery technique, but a representation of the region's cultural expression, creating intricate and lasting pieces of art from wool and thread.

F) Description:

Crewel is an inextricable part of Kashmiri handicrafts. Dr. Gupta Santosh in his book, Jammu; Kashmir Handicrafts And Global Market endorses that Crewel embroidery is one of the most promising handicrafts items of Kashmir.6 The name crewel comes from the word "Krua" or "Clew" which means a ball of yarn. It is a hand embroidery technique traditionally done in Kashmir. It uses a hook (aari) and mostly woollen yarns. The hook creates a series of looped stitches. Crewel embroidery done in Kashmir is different from the one done in the other parts of the World. Crewel Embroidery is usually done on unbleached fabric called "dosooti" in Kashmir, "do" meaning two, and "sooti" meaning cotton. The stitches are bolder and are used for embellishing yardages used as upholstery and drapery. In both cases, the patterns are usually linear abstractions of the local flora, with the outlines embroidered. The embroiderers are usually men from the Sunni Muslim community. (Ranjan Aditi)

Crewel embroidery is of two types:
1. One-ply embroidery: A single ply wool yarn is used for this type of embroidery.
2. Two-ply embroidery: More durable 2-ply wool yarn is used in this type, it is costlier of the two and is known to last decades if maintained properly

Raw Material
The main raw materials for doing crewel embroidery are fabric and thread. Traditionally an unbleached cotton fabric called dosooti was used as the base fabric for the embroidery. It is a cloth made by running two yarns in warp and weft as its name refers to Do (two) Sooti (cotton).

It is one of the coarser cotton piece goods produced in the Indian subcontinent. Parvez Dewan in his book, The People &Culture Of J&K, mentions that the base is normally white or off-white cotton. The cloth used is called dasooti. 9 Presently, a lot of exploration has been done for the base fabric. Jaitley Romanic and Sarabhai Mallika in their book Tanabana, mentioned that with changing market trends and the need to improvise, different base fabrics like velvet, silk, organza and others have been experimented with.

Thread

Crewel embroidery is done with single-ply wool yarn. Traditionally single-ply yarn is used but nowadays two-ply yarn may also be used for the embroidery as it is durable and gives the embroidery a neat and uncluttered look.

Tool

Aari (Hook): Crewel Work is done with a peculiar kind of hook, known as aear in Kashmir. The needle is thick and has a small, bent tip. The hook catches the thread on the backside of the fabric, pulling it to the front side to create loops.

Technique

Crewel-work is a form of embroidery. The broad principles are the same as in chain-stitching. However, here the cloth used as the base is seen clearly because its surface is covered with embroidery only where there is a motif. The base is normally white or off-white cotton. Jasleen Damija in her book, Asian Embroidery, explains that Crewel work, which is achieved in the same way as ari, is very common in Kashmir. This was almost certainly introduced by the British. The embroidery is of two types-Razakar and Poshkar. Raizkar signifies the use of thin yarns in a raised effect, while Poshkar means work with thick threads. The heavy linen base traditionally used in England was not available in India, and so a local version was invented, a heavy, two ply cotton, hand woven locally. This is known as dosooti, “Do” meaning two, and “sooti” meaning yarn, thus two ply. The embroidery wool is quite thick, hairy, taken from the local sheep and hand spun and woven.

The thread is passed through the ari, hooked needle, and is to be held under the base fabric, and the hook is inserted to pull a series of loops, each emerging from within the previous, to the fabric’s surface. Crewel work uses a thicker ari and is generally done on unbleached fabric; its stitches are bolder, and it is used for embellishing yardages used as upholstery and drapery. The outlines worked first, followed by the filling of motifs according to the design requirement.

In every type of hook work embroidery, the hook is held under the fabric to be embroidered. It is pushed up along the lines of the design and pulled back with the vam on top of the fabric forming a continuous long chain of loops which move along the lines of the design.

The hook’s point is always towards the right, and there is a mark made on the wooden handle. On this mark (which is always in the form of a slightly carved out portion), the thumb of the right hand is placed. The index finger extends to as much of the length of the stem of the hook as it can reach. Some mustard oil is applied to reduce the friction with the stem of the hook or they use a leather cover on the finger called thimble or nyath. The left hand is always under the cloth, and the hand holds the yarn. It encircles the hook with the yarn every time the former is pushed through the fabric. As the yarn is pulled slightly and held stretched beside the hook the latter is pulled up to the top of the cloth and through the previous loop. Thus, a series of loops are pulled to the surface, emerging from within the previous, forming a continuous long chain of loops that move along the design lines. The outlines are filled first then the motif. The craftsmen, both men and women, sit with their knees up and their backs against a wall and the

fabric spread on their knees. A thimble called nyath is worn on the index finger of the right hand to protect it from the prick and to push the needle into the thick cloth. Families work together to complete the work while humming the folk songs of Kashmir. Artisans work with dedication and gratefulness for the craft they have acquired, passed on from generations to generations, their hearts synced with the hooked loops.

Designs

The adroitness of Crewel embroidery is the salient part of Kashmiri arts and crafts. It is a technique in which continuous loops are created to form a design. The thread is passed through the aari, hooked needle, and is always held under the fabric to be embroidered, and the hook is used to pull a series of loops, each emerging from within the previous, to the surface of the fabric. In both cases, the patterns are usually linear abstractions of the local flora, with the outlines embroidered. The motifs and figures of the foreground are mostly embroidered with bright colour yarns. The motifs of the crewel embroidery are inspired mainly by nature. Classic motifs like booen (chinar), badum (paisley), yambarzal (hyacinth, narcissus), daenposh (pomegranate), pamposh (lotus), sosan (iris), dachh (grapevine) and the tree of life are among the most popular motifs.(Kashmir box)

G) Geographical area of Production and Map as shown in page no:

Srinagar- Latitude34.0837° N**, Longitude** 74.7973° E
Anantnag- Latitude 33o-20' to 34o-15' N, **Longitude** 74o-30' to 75o-35' E

The main locale for the craft of Crewel work is Srinagar and Anantnag. Srinagar is a unique city with a rich living heritage, an ideal environment to study the impact of historical change on art, architecture and history. Its location in the middle of the valley of Kashmir, surrounded by extremely high mountains, has allowed it to develop a unique culture of its own. The Valley is located at the crossroads of four very different civilizations, each of which had a tremendous impact on its local history. In Srinagar, it is practiced in almost every part but mainly in the downtown area of the city. Downtown, popularly known as Shahar-e-Khaas, is the largest and the most densely populated area of the city of Srinagar in the Jammu and Kashmir. The area is mostly located on the banks of Jhelum river about five km (3.1 m) from the city centre. The area is considered as the core point in the city as the first inhabitants of Srinagar lived there. In general, the whole area to the north of city centre Lal Chowk is considered a part of downtown although some areas hold high significance. The Jamia Masjid, Srinagar and many other shrines are located here, which makes it the central spiritual, religious, political and moral centre of whole Kashmir. The subdivisions of downtown include include Nawakdal, Raziya Kadal, Gojwara, Kawdoora, Saraf Kadal, Bohri Kadal, Nawa Kadal, Nayidkadal, Khanyar, Sekidafar, Ali Kadal, Habba Kadal, Fateh Kadal, Kani Kadal, Nawabazar, Tarabal, Khanqah e Mola, Hawal, Lalbazar, Hazratbal, Zadibal etc

Dewan Parvez, in his book, The People & Culture of J&K, mentions that crewel work is done and sold at the Bund, Dal Gate, Karan Nagar, Karfali Mohalla, Nawab Bazar, Nawa Kadal, Nayeed Kadal, Nowhatta, Safa Kadal, Tangpora Mohalla, Tarabal area of Srinagar. Anantnag District is in the southern sector of Jehlum Valley. It is because of its rejuvenating climate, the inspiring majesty, its lofty mountains, the melodious flow of sweet waters of its springs and streams, fertile soil, fragrant flowers and delicious fruits that the district has come to be synonymous with greatness.

It is also called the “land of countless springs”. The district is known for important monuments like Martand Temple (Sun Temple) at Mattan, Mughal Gardens of Achabal, Verinag and

Padshahi Bagh (Dara Shiku Garden) at Bijbehara. The district has a fair number of shrines like the Shrine of Hazrat Zain-ud-Din Wali (R.A.) at Aishmuqam, Shrine of Baba Hyder Reshi (R.A.) in Anantnag town, Shrine of Naseeb-ud-Din Ghazi (R.A.) at Bijbehara and many others in different villages. The Anantnag Crewel and Chainstitch embroidery cluster is spread around Redwan, Lechipora, Batapora, Laizbal, Goner, Danter, Frisal, Yaripora, Wanpow, Qazigund, Duroo Shahabad, Mehendi Kadal, Bragaw, Anchidora, Sarnal Payeen, Sarnal Bala, Pehroo, Chak Anchidora, Aang, Mattipora, Chee, Rakhi Chee, Anzwala, Krangsoo, Paibugh &Mattan villages of District Anantnag. Apart from Srinagar and Anantnag district, the embroidery is also done in Baramulla, Budgam, Kupwara and Pulwama areas of Kashmir

About Srinagar

Srinagar is the summer capital of Jammu and Kashmir and situated in the Kashmir region of the Indian subcontinent. The city lies along the banks of the Jhelum River at an elevation of 5,200 feet(1,600 meters) in the valley of Kashmir. Summer capital is situated in the center of Kashmir Valley and is surrounded by five districts.

Srinagar has the distinction of having a multifaceted and unique cultural blend, making it exclusive from the rest of the country, not only from the cultural forms and heritage, but from geographical, demographical, ethical, social entities, which forms a distinct spectrum of diversity. The city is the home to an extraordinary range of social, cultural and economic assets in its traditional knowledge systems, oral traditions, and in the skills of arts and crafts.

The city has a rich living heritage and could be accessed by both land and water. It emerged as a trading post and developed into an urban center. The city was founded during the reign of Ashoka in 250 BC near Pandrethan, and the capital was shifted to the present site around Hari Parbat by Paravasena XI, in the sixth century, known as Parvapura at that time.

About Anantnag

Anantnag is situated around 30 miles (50 km) southeast from Srinagar, on the north of the Pir Panjal Range. Geographically the district lies between 33o-20’ to 34o-15’ north latitude and 74o-30’ to 75o-35’ east longitude. Anantnag is an agricultural trade centre and the southern headquarters for navigation of large boats in the Vale of Kashmir. Many springs flow from the land around the city, Anantnag claims the largest number of streams (Nallas) like Sandran, Brengi, Arpath and Lidder. The most important among these is Lidder which takes off from Sheshnag lake and irrigates the maximum area of the district. It is the third biggest city in Jammu and Kashmir after Srinagar and Jammu. Anantnag has an essential position lying on the fundamental North-South Corridor Road and with the biggest number of tourist destinations, it is a monetary centre point of Kashmir Valley.

Socio- cultural and economical significance of the craft.

The proficiency of Crewel work is indigenous to Kashmir. This embroidery has developed into one of the most important crafts of Kashmir, which continued to flourish in spite of political unrest, and exported to many parts of the world to be used as furnishings, carpets, curtains, Clothes, accessories and more.

The skill and techniques for the crewel embroidery have been learned by the new generation from the old generation. There are thousands of people involved in the adroitness of this craft. It is the main source of livelihood for many families. It provides financial support to a lot of families, and also funds their marriages, Pilgrims, construction, education etc. Women involved in this craft took up this art for disporting themselves from their hectic schedule. Many women do this because they can earn money without leaving home and help their families run the

house. A group of people work together on curtains, rugs and other fabric and complete the work while humming the folk songs of Kashmir.

It has a massive local market as gazillions of people have an ardourness to have a product emblazoned with Crewel embroidery at their house. It holds a significant share in the overall production and export of the Union Territory. Handicrafts sector creates the highest percentage of employment with 33.12% of chain stitch and Crewel. According to the research done in 2017, it has been observed that the chain stitch and crewel are the highest contributors of the export (35.97%) in the handicrafts department.

H) Proof of Origin (Historical records):

Crewel is one of the traditional and oldest forms of embroidery in Kashmir. The history of this exquisite craft is unsubstantiated but it has been articulated in the book, Arts and crafts; Jammu and Kashmir: land, people, culture by D. N Saraf that this craft came to Kashmir when traders from Damascus (A city situated in the centre of the Silk Road lay at the crossroads of two trade routes one from India) came to Kashmir in the 13th century. (D.N Saraf). Jasleen Damija, Indian textile art historian, in his journal, Asian Embroidery, noted that crewel was certainly introduced by the British. At the time of the colonial rule, the laws in Kashmir forbid the purchase of land by outsiders, the British, loving the cool air of the mountains and flocking in summer to escape the terrible heat of the plains, got round this by building houseboats to float off the shores of the many lakes. These were made to resemble as far as possible English country cottages. They required appropriate furnishing fabrics and curtains for these houseboats built so far away from home, in rolling floral patterns of flowers and leaves. And thus, let us suppose, came into being the curtain, and upholstery fabric designed and made so as to resemble the cottage style used in England. This could be achieved by the use of heavy crewel work. The heavy linen base traditionally used in England was not available in India, and so a local version was invented. This fabric was known as dosooti, “do” meaning two, and “sooti” meaning cotton

Documentation- Historical references in books

Emmett, D., 2018. The embroidery artisans of the Kashmir Valley: cultural imports and exports from historical and contemporary perspectives

Crewel originally referred to the wool thread used to make the embroidery stitch and has been implemented in many cultures around the world. The arrival in Kashmir of the crewel and chain stitch or zalakdozi craft is unsubstantiated but is thought to have originated in Asia Minor and brought to Kashmir by Turkish tradesmen during sultan Zain-ul-Abidin’s rule. Embroidered garments and furnishings were considered a status symbol in Muslim societies and often exchanged as gifts between dignitaries. Chain stitch was also to be found in the western side of India, notably the Mochi embroiderers of Gujarat. In the Victoria and Albert Museum’s collection a hanging of fine chain stitch embroidery made by professional male embroiderers of the Mochi community dates from around 1700. It worked with both a hook, called an ari, and a needle. Originally developed for embroidering on leather, for items such as belts, floor-coverings and shoes, the ari-work was adapted for use on cloth, and soon attracted the attention of western travellers to Gujarat. The East India Company exported these embroideries from the port of Cambay. Trade routes from Central and East Asia, as previously mentioned, crossed through the Kashmir Valley so it is possible the embroidery craft was also linked to the work done in Gujarat. Imported Asian influenced motifs visible in both crewel and chain stitch from Kashmir and Gujarat became popular in Britain on embroidered cloth that was exported by the East India Company in the 1700s. Likewise the felt rugs or namdas handcrafted in Kashmir are thought to have originated in Central Asia, the felt-making technique practised there by nomadic

groups for centuries. Just as textiles were exported from Kashmir it seems influences from other cultures on the embroidery crafts came to Kashmir resulting from trade.

Jaitley Romanic, Sarabhai Mallika, Tanabana -Handwoven and Handcrafted Textiles Of India- Darpana, Ahmedabad, 2007.
Crewel embroidery was initially used to embellish namdas. Though not the most celebrated form of embroidery, it is very versatile and lends itself well to the imitation of different design traditions. The crewel technique can be adapted to different styles of design both traditional (e.g. kilim, tree of life and contemporary.

Gaatha- Namda
Before the 19th century plain Namda was mainly produced in Ladakh and were brought from Central Asia for embroidery in Kashmir. In 1420 it was during the time of Sultan Zainulabdin when the embroidered Namda industry flourished in Kashmir. For these rugs local wool was used. It was in 1850 that Las Khan from Kabul settled his first workshop in Srinagar. The craft later flourished in other parts of the city and the area was named Namdagari Muhalla

D.N Saraf, Arts and crafts; Jammu and Kashmir: land, people, culture, Abhinav Publications, New Delhi, 1987 From the accounts in the book by DN Saraf 'Arts and Crafts, Jammu and Kashmir' one can state that Crewel -chain stitch embroidery was a peculiarity of Kashmir as felted Namda we imported to Kashmir for embroidery. The book states that the estimated number for the plain 'namdas' imported into Kashmîr every year till 1940 were around 2,00,00022. They were mostly embroidered with Crewel.

Jaitley Romanic, Sarabhai Mallika, Tanabana -Handwoven And Handcrafted Textiles Of India- Darpana, Ahmedabad, 2007. Little is known about the history of crewel embroidery in Kashmir. Needing nothing but a simple metal hook, some believe that it was imported from France where a similar hook was used for crochet. According to another version it was the shoemaker's hook that inspired the Kashmiri craftsman into aca and experimenting with embroidery. Yet another version has it that the craft started almost 700 years ago, in the time of Shah Hamadan, the great saint whose initiatives in encouraging the kani shawl industry and other crafts in the latter part of the 14 century are well-documented. It is also quite possible that Damascus traders brought the craft to Kashmir in the late 13th century

D.N Saraf, Arts and crafts; Jammu and Kashmir: land, people, culture, Abhinav Publications, New Delhi, 1987 Damascus traders are said to have brought this craft to Kashmir in the 13th century. Crewel embroidery now has deep roots in local soil, having developed into an important product that is being embroidered in this style. About 20,000 workers are involved in this craft producing goods worth Rs. 5 cores a year. This craft has great scope, provided occasional charges are made to suit the market trends.

Jasleen Damija, Asian Embroidery, Abhinav Publications, India, 2004
Jasleen Damija, in her book, Asian Embroidery, explains that Crewel work, which is achieved in the same way as ari, is very common in Kashmir. This was almost certainly introduced by the British. Laws in Kashmir forbid the purchase of land by outsiders, the British, loving the cool air of the mountains and flocking in summer to escape the terrible heat of the plains, got round this by building houseboats to float off the shores of the many lakes. These were made to resemble as far as possible English country cottages. They required appropriate furnishing fabrics and curtains for these houses built so far away from home, in rolling floral patterns of flowers and leaves. And thus, let us suppose, came into being the curtain, and upholstery fabric designed and made so as to resemble the cottage style used in England. This couldbe achieved by the

use of heavy crewel work. Raizkar signifies the use of thin yarns in a raised effect, while poshkar means work with thick threads. The heavy linen base traditionally used in England was not available in India, and so a local version was invented, a heavy, two ply cotton, hand woven locally. This is known as dosooti, “Do” meaning two, and “sooti” meaning cotton, thus two ply. The embroidery wool is quite thick, hairy, taken from the local sheep and hand spun and woven. Even today this is employed in preference to the finer but less textured machine spun imported Australian wool.

Specific references- Old pictures with Crewel

General Historical Development of the Craft over Time
Crewel work is a variant of aari kari done exactly with the same hook work technique; the only difference is that the hook needle used in Crewel is thicker, locally known as aear. Another difference is the thread used in crewel, it is generally a much thicker thread of either wool or silk to get that bold embellishing effect. Crewel or chain stitch embroidery is usually done in upholstery and drapery fabrics, like curtains, cushion covers, and on accessories like bags and clutches.

Crewel embroidery is one of the most promising and growing handicrafts items of Kashmir. The goods are available as curtains, bed covers, tablecloths, pillow covers, cushion covers etc. Though this art tradition is not as old as other crafts of Kashmir, it has gained tremendous popularity and its production has displayed an increasing trend over the years. During British rule in India, officials appointed in Kashmir lived in houseboats which were decorated in a way that resembled their houses in England. They required appropriate furnishing fabrics and curtains for these houses built so far away from home, in rolling floral patterns of flowers and leaves. And thus, let us suppose, came into being the curtain, and upholstery fabric designed and made so as to resemble the cottage style used in England. The heavy linen base traditionally used in England was not available in India, and so a local version was invented, a heavy, two ply cotton, hand woven locally. This is known as dosooti, “do” meaning two, and “sooti” meaning cotton. The embroidery wool is quite thick, hairy, taken from the local sheep and hand spun and woven.

In typical Crewel Embroidery the patterns are usually linear abstractions of the local flora, with the outlines worked first and the forms filled in later. ‘Crewel-work’, is normally used in curtains. It is also used in upholstery, tablecloths, cushion covers, bedcovers and a roundish shopping bag unique to Kashmir. “Crewel-work is rolled into bales and sold by the metre. Therefore, there are no borders at the top or bottom of the cut-pieces, because they are not individual works of art.

Over the years, the craft has been through many changes. The motif language and design direction have changed a lot. Crewel artisans have adapted a more English colour palette and contemporary motifs, providing a fresh look to the craft. Many products have been added to the product range, significantly increasing the market for Crewel embroidery. Traditionally the Crewel embroidery was done on the basic dosooti fabric but with changing market trends and the need to improvise, different base fabrics like velvet, silk, organza and others have been experimented with. Crewel embroidery was initially used to embellish namdas. Though not the most celebrated form of embroidery, it is very versatile and lends itself well to the imitation of different design traditions. The crewel technique can be adapted to different styles of design both traditional (e.g. kilim, tree of life and contemporary.29 The crewel embroidery in earlier times was done only with wool and the fabric used was linen but later on many other yarns like silk and fabrics like cotton and wool were involved in the crewel embroidery.

Crewel and Chain stitch craft contribute a total of 33.12% in export of Kashmir Handicrafts. Also it contributes significantly in the handicrafts sector, and generates employment to a larger population of the handicrafts sector

I) Method of Production:

Raw Materials

Fabric

The unbleached coarse cotton fabric produced mostly in the Indian subcontinent called dosooti is used as the base fabric for the embroidery. It is a cloth made by running two yarns in warp and weft as its name refers to Do (two) Sooti (cotton). Presently, a lot of other fabrics like velvet, silk and organza are also used as the base fabric.

Thread

Crewel embroidery is done with single-ply wool yarn. Traditionally single-ply yarn is used but nowadays two-ply yarn may also be used for the embroidery as it is durable and gives the embroidery a neat and uncluttered look.

Tools

Tracing paper

It is used to draw the basic design layout. It is sourced locally and is available inrolls.

Needle for pricking the tracing paper

Sewing needle is used to make holes in the tracing paper.

Ink

The ink used for tracing is the mixture of black ink powder and kerosine oil.

Aari (Hook)

Crewel Work is done with a peculiar kind of hook, known as aear in Kashmir. The needle is thick and has a small, bent tip. The thread is passed through the ari, hooked needle, and is always held under the fabric to be embroidered and the hook is used to pull a series of loops, each emerging from within the previous, to the surface of the fabric.

Neyuth (thimble) A thimble is a small pitted cup worn on the finger that protects it from being pricked or poked by a hook. Thimbles are usually made from metal, leather, rubber, and wood. Crewel artisan use leather thimble which is usually made by the artisans themselves.

Production Process

Base Fabric selection

Fabric selection is the first step of Crewel embroidery, and the base is typically white or off-white coarse cotton. It is generally done on unbleached fabric (dosooti), which is thicker and heavier. The traditionally used material is cotton, but as the craft has evolved, the base fabric has also changed. The introduction of velvet, organza and other fabrics is visible in the current product range. Crewelwork is also done on rugs like Namda and Gabba, so sometimes the base for embroidery may be the stitched Gabba or felted Namda. The fabric selection includes the sourcing of fabric from the local markets of Srinagar or sometimes the fabric is provided by the buyer or consumer. Crewel Embroidery is usually done on fabric bolts of varying widths - 56" wide "dosooti" cotton manufactured in looms locally in Kashmir being the most common. Fabric bolts may be 20 to 33 yards in length, although custom orders at times require longer yardages per bolt.

Preparing the Fabric
Once the fabric is selected and sourced, it is prepared for embroidery. Preparation usually involves cutting, stitching and finishing the raw edges, which is done manually.

Dyeing of Base Fabric (Optional)
Dyeing applies dyes or pigments on textile materials such as fibers, yarns, and fabrics to achieve colour with the desired colour fastness. Chemical dyes are used with alum to hold the shades for the dyeing. Dyeing is not an essential step as the crewel products usually have a white or off white base. However sometimes the base fabric is dyed according to the consumer demand. For dyeing the fabric is usually sent to dyeing houses nearby.

Drawing and Pricking
The role of naqaash is significant in Crewel embroidery. Designs are drawn on tracing paper with the help of pencils by a traditional designer known as Naqash, Naqaash designs the basic layout of embroidery and draws the designs from scratch according to the requirement of the client or embroiderer. Apart from floral patterns, animals and human figures form the main designs. The patterns are usually linear abstractions of the local flora. Most of the motifs used are inspired by the splendid nature of Kashmir. However, sometimes the patterns can be geometric. They are drawn on cloth with the help of paper stencils. The naqaash draws the designs on tracing sheets, bought in rolls, which are then reused, as the motif bank in most products is the same. After the drawing is complete, the traced lines are permanently defined by being pricked through with a small needle. The naqaash pokes small holes into the sheet according to the motif lines. This step is known as pricking. Pricking is done with the help of a needle tool which is self-made by the naqaash. A pricking tool is usually an old pen with a needle attached at the tip with thread or tape. Common motifs drawn are:

- Guli Lala-Tulip
- Pamposh-Lotus
- Kilim design
- Turkish Afghan Strips
- Dreaenz-daar
- Booni-Chinar
- Dooni-Walnut
- Hassi-Border
- Poosh-Flower
- Raat Mangul-Owl
- Ruskat-Deer
- Batakh-Duck
- Hous-Elephant
- Seeh-Lion
- Ounth-Camel
- Badum-paisley
- Yemberzal-hyacinth
- Daenposh-pomegranate
- Sosan-iris
- Dachh-grapevine
- Poskar- Floral design
- Janwardaar- animal figures

Tracing on Base Fabric
Design tracing of the pattern on base fabric is done by the naqaash only. The base fabric is spread on the pattern table for tracing, and the tracing sheet is placed on the top. The ink used for tracing is the essential black ink powder mixed with kerosine oil, and this ink is not washable. Some naqash use washable ink pens and directly draw the pattern on the base fabric. The design gets printed on the fabric as liquid penetrates through the holes and transfers the outline of the design on the underneath cloth. Traditionally, designs for embroidery were printed with wooden blocks, but now tracing paper or opaque sheets of lacquered polyester are used. The designs are traced on to these sheets and the lines of the design perforated. These sheets are placed on the fabric and black soot-like powder mixed with kerosene is rubbed through the perforations due to the fabric. In most cases the designer and the tracer are the same person. The design is printed on the fabric at the block makers, with wood and metal blocks. Crewel work designs are much larger than other embroidered fabrics.

Selection of Yarn and Colours

The selection of yarn is done according to the design. For the basic crewel curtain, mostly greens, pinks, reds and oranges with a mix of yellows are used. However for modern crewel designs pastel colours with tints and shades of the same colour are used. The base is normally white or off-white cotton so the colours are not as bright either. Over the years the colour scheme has changed a lot due to the preference of much subtle colours and changing trends. The single-ply yarn is either sourced directly from the market or is dyed according to the requirement of the design.

For dyeing the yarn is sent to the local dyers nearby. Dyer (locally called Rangur) boils water and adds colours in it, then the yarn is dipped in the prepared colour, and constantly matched with the sample provided. The yarn used for crewel and chain stitch is usually brought from outside the state. The yarn used is basically in three types which is fetched by numbers and the superior quality is more expensive than other No 501, No 502,No 560. i.e the yarn originally comes in two colours White natively called 'Chit / Safeed' Creamish natively called 'Zag'

A single ply woollen yarn is mostly used for this type of embroidery. Using a more durable two-ply woollen yarn for embroidery, it is costlier of the two and is known to last decades if cared for properly. The finer wool gives these fabrics a more neat and uncluttered appearance in comparison.

Embroidery

The embroidery on the traced designs is done by a traditional embroiderer known as Jalagdooz.

Two types of crochet hooks are used for this embroidery. A smaller and narrower hook is used for chain stitch and fine quality crewel work. The same embroidery stitch is used for both crewel and chain stitch but in crewel work the fabric shows around the embroidered Designs. For fine crewel work two ply good quality wool is used and the threads are pulled tight. On the back of the fabric the stitches look neat, almost machine made. The other crochet hook is larger and thicker. Crewel work done with this hook has bigger stitches and looks loose. The design is made in such a manner that if one stitch is opened whole of embroidery will come off.

Crewel embroidery covers only the areas with patterning. The first sample is embroidered under supervisors, before going into production. Crewelwork embroiderers are paid by the weight of the wool embroidered, which is approximately Rs 1600 to Rs 1800 per kilogram. In every type of hook work embroidery, the hook is held under the fabric to be embroidered. It is pushed up along the lines of the design and pulled back with the vam on top of the fabric forming a continuous long chain of loops which move along the lines of the design. The hook's point is always towards the right, and there is a mark made on the wooden handle. On this mark (which is always in the form of a slightly carved out portion), the thumb of the right hand is placed. The index finger extends to as much of the length of the stem of the hook as it can reach. Some mustard oil is applied to reduce the friction with the stem of the hook or they use a leather cover on the finger called thimble or nyath. The left hand is always under the cloth, and the hand holds the yarn. It encircles the hook with the yarn every time the former is pushed through the fabric. As the yarn is pulled slightly and held stretched beside the hook the latter is pulled up to the top of the cloth and through the previous loop. Thus, a series of loops are pulled to the surface, emerging from within the previous, forming a continuous long chain of loops that move along the design lines.

The craftsmen, both men and women, sit with their knees up and their backs against a wall and the fabric spread on their knees. A thimble called nyath is worn on the index finger of the right hand to protect it from the prick and to push the needle into the thick cloth. Families work together to complete the work while humming the folk songs of Kashmir. Artisans work with dedication and gratefulness for the craft they have acquired, passed on from generations to generations, their hearts synced with the hooked loops

Final Fringing
At this stage any extra thread which is visible on the work piece is cut to give it a cleaner look.

Washing
Once a fabric is embroidered, it is sent for washing to remove all traces of dirt and stains it may have accumulated during the embroidery work. After finishing the piece is sent for washing to the local washerman (doub or dhobi). The washerman are situated in the Alikadal area of srinagar and for other districts each cluster has its specific washerman. After washing the final piece it is left to dry for several days, depending on the weather. The drying process may take a day.

Ironing
Before sending the piece back to the vendor it is ironed with hands or by large steam irons. The fabric is steam ironed in a rotary steam iron (material goes in full width) that results in a nice crease-free fabric ready to use. Large steam irons are mainly used for fabric that is of bigger dimensions. The machine is known as a calendering machine which has larger rollers that steam iron the final piece. Earlier ironing was done manually later machinery made things easy. After ironing the piece is sent back to the vendor where it is packed according to the market.

Final Product
Crewel is a specialised form of embroidery done with a hook locally known as ari with woollen yarns on coarse cotton fabric known as dosooti. It is commonly used for drapery and upholstery. Series of loops are made with a hook creating an embossed motif to add richness to the textile. Crewel embroidery is done on thick material popularly used for furnishing and usually carries floral and creeper designs. Other uses include making bedspreads, pillows and throws. Crewel fabric may be used to cover chairs or sofas and even made into table runners. Embroidery may be single colour, three shades of one colour or a range of colours (multicolor). Other than bed sheets and cushion covers Shams, Duvet Cover; Drapery, Upholstery, Decorate cushions, curtains,rugs and wall hangings. The wall hangings come indifferent sizes i.e. 2 x 2 feet, 3x5feet, 6x4feet, 6x9feet, 9x12 feet

Designs & Description of Quality
Crewel Embroidery has a wide range of designs, Dreaenz-daar is the most prominent and famous design used in Crewel Embroidery. Some of the prominent embroidery designs are Turkish Afghan Strips, Booni-Chinar, Dooni-Walnut, Hassi, Poosh, Raat Mangul, Ruskat, Batakh, Hous, Shah etc. Crewel Work is a variant of Aari Kari done exactly with the same hook work technique; the only difference is that the hook needle used in Crewel is thicker which is locally known as aari. Another difference is the thread used in crewel or chain stitch; it is generally a much thicker thread of either wool or silk to get that bold embellishing effect. Crewel or chain stitch embroidery is usually done in upholstery and drapery fabrics, like curtains, cushion covers, and on accessories like bags and clutches. The designs of Crewel Embroidery are chiefly used for drapes and upholsteries. Crewel work is a more spread out embroidery on the fabric with patches of the background fabric showing a little here and there, there is absolutely no fabric patch visible in the Chain Stitch. The designs of Crewel depend upon the

size and the type of inspiration for the embroidery, each piece is adorned with a different embroidery pattern and colour palette varies from design to design. The beautiful colours of embroidery threads, with an off-white base makes the embroidery stand out. Crewel is not only preferred by locals but widely accepted by other parts of the world. The artisans have developed a range that caters every class of the society, which makes the craft available to all masses. Crewel artisans are large in number with more than 12000 active artisans located in the Srinagar city only. Artisans are open to experimenting with the style of inspiration according to the changing trend. With no specific quality parameters for Crewel embroidery, the quality wholly depends on the type of yarn used for embroidery, fabric and the design intricacy.

J) Uniqueness:

Kashmir Crewel work stands out as a unique and deeply ingrained traditional embroidery technique, celebrated for its craftsmanship, distinctive design, and cultural significance. Here's an exploration of what makes it so special:

Spread-Out Embroidery:
One of the key characteristics of Crewel embroidery is that it's a spread-out form of embroidery, meaning the stitches do not completely cover the fabric. Instead, the background fabric is left visible in certain areas, creating a delicate and balanced contrast between the design and the base material.

Decorative Surface Embroidery:
Crewel embroidery is a decorative surface technique that uses wool yarn to enhance the fabric's aesthetic. The design is embroidered using a series of looped stitches that trace an outline applied to the fabric. This technique involves layering the yarn in intricate patterns that allow the fabric to breathe, showing off the beauty of the material as well as the embroidery.

Use of the Aari Needle:
The work is done using a specialized tool called the Aari needle, which has a larger hook. The needle is held beneath the fabric, and the yarn is pushed up and pulled back through the fabric to create continuous loops. These long chains of loops are the signature feature of Crewel work, adding texture and elegance to the finished piece.

Local Materials and Handmade Tools:
The materials used in Crewel work are indigenous to Kashmir, making it distinct to the region. The wool yarn used can be natural or locally dyed, often in beautiful, rich colors. The Aari needle itself is handmade by local artisans, contributing to the artisanal quality of the embroidery. The designs are typically printed onto the fabric using wood and metal blocks, a traditional technique that ensures the designs are crisp and accurate.

Blending of Local Crafts:
The craft of Crewel embroidery is a blend of multiple local industries, including dyeing, yarn sourcing, fabric production, and embroidery. This interdependence of small industries is a hallmark of Kashmiri craftsmanship, making Crewel work a true representation of the region's heritage.

Designs and Products:
The designs used in Crewel work often feature floral patterns, which are inspired by the local flora of Kashmir, although geometric and abstract motifs can also be found. These designs are

primarily used on upholstery fabrics such as curtains, cushion covers, and bed covers, as well as accessories like bags and clutches.
Crewel work is applied to duck and dosooti cotton fabrics, both of which are durable and suitable for large-scale embroidery.

Cultural Legacy:
The skills involved in Crewel embroidery have been passed down through generations, with each artisan mastering the technique through years of practice. This tradition is not only a form of artistic expression but also a representation of Kashmir's rich cultural and artistic legacy.

Kashmir Crewel work is a distinctive form of embroidery that is deeply rooted in the region's culture and history. Its uniqueness lies in the technique of using long, continuous loops of wool to create intricate designs that allow the background fabric to remain visible. The craftsmanship, the use of locally sourced materials, and the handmade tools all contribute to the singularity of this art form, making it a celebrated piece of Kashmiri heritage.

K) Inspection Body:

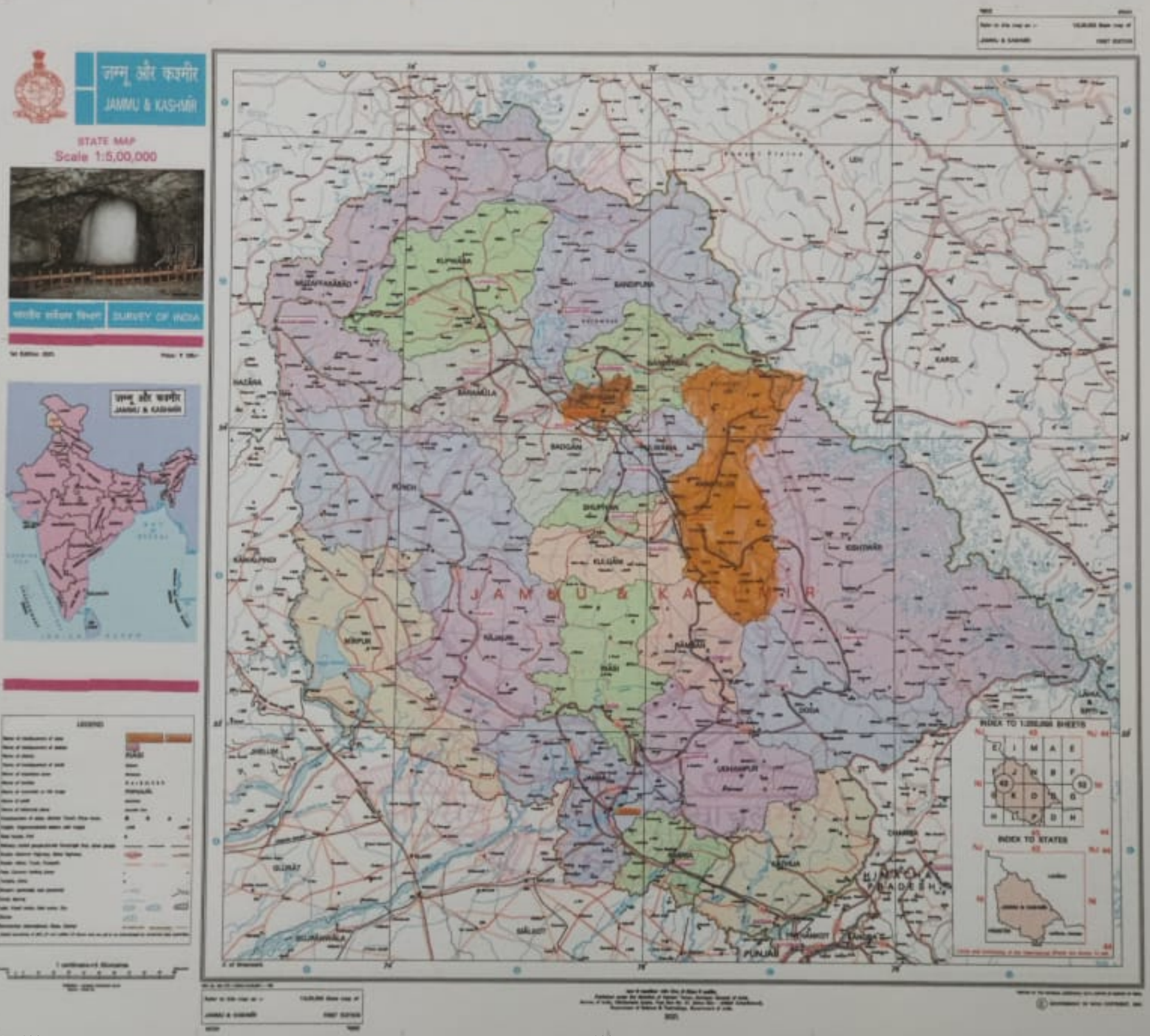
The proposed structure of inspection and implementation of the GI:

- One representative from Development Commissioner Handicrafts, Ministry of Textile, Government of India
- One representative from Directorate of Handicrafts and Handloom, Kashmir
- One representative from Craft Development Institute, Srinagar
- One representative from Indian Institute of Carpet Technology (IICT)
- One representative from "The Wirasat Handicrafts Industrial Cooperative Ltd".
- One representative from Crewel and Chain-stitch Manufactures Exporters Association.

L) Others:

Crewel is a cardinal part of Kashmiri heritage, and is used for embellishing yardages used as upholstery and drapery. It is a very important part of the Kashmiri handicrafts section and has a vast market. It is famous worldwide. It is practised in almost every district of Kashmir. This skill is mostly passed through generations. There are umpteen number of people involved in this craft, and thousands of families are dependent on it for livelihood. There are around 12,000 registered crewel artisans in Srinagar and in Anantnag there are around 3000 artisans working in the cluster out of which around 2000 men and 1000 women. There are around 250 units with each unit comprising 3-4 artisans besides approximately.

FOR KASHMIR CREWEL.



- ANANTNAG.
- SRINAGAR

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1048
Application Date: 31-01-2023

Application is made by The Wirasat Handicrafts Industrial Cooperative Limited at Kashmir Haat (Exhibition Ground), Srinagar, Kashmir-190 009, Jammu and Kashmir, India for Registration in Part - A of the Register of **Kashmir Tweed** under Application No. 1048 in respect of Textiles and textile goods, bed and table covers, Clothing, footwear, headgear falling in Class – 24 & 25 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : The Wirasat Handicrafts Industrial Cooperative Limited

B) Address : The Wirasat Handicrafts Industrial Cooperative Limited,
Kashmir Haat (Exhibition Ground),
Srinagar, Kashmir-190 009,
Jammu and Kashmir, India

C) Name of the Geographical Indication :

KASHMIR TWEED

D) Types of Goods : **Class 24 -** Textiles and textile goods, bed and table covers.
Class 25 - Clothing, footwear, headgear

E) Specification:

Kashmir Tweed is a traditional, handwoven fabric originating from the Kashmir Valley, known for its intricate weaving process and high-quality wool. It holds a special place in the region's cultural heritage and is created using a unique technique and local materials. Below is a breakdown of its production process, special characteristics, and common uses.

Production Process
Weaving Loom:
Kashmir Tweed is woven using a traditional wooden loom called a Pit Loom. This loom has a unique setup where the weaver sits in a pit, and pedals are used to control the weaving process. This method is integral to creating the distinctive texture and patterns of the tweed.

Materials:

The fabric is primarily made from locally sourced wool. The wool is spun by hand and machine into yarn, and later handwoven into the tweed fabric. Specially soft wool is used in the production, known as Pottu and Chadar in various parts of Kashmir.
The wool comes from native sheep breeds like Gurezi, Bakerwali, Kashmir Merino, and Karnahi, which are well-adapted to the alpine pastures of the region.

Weaving Process:
The process involves the interlacing of two sets of yarn (warp and weft) to form fabric. The yarn is wrapped around a device called the "Baie" (also known as the fly shutter), which is crucial for the weaving process. The movement of the pedals allows the yarn to interlace, creating the desired pattern.
Patterns in Kashmir Tweed often feature dynamic designs like squares, lines, and checks, woven from different colored threads to create a vibrant, textured effect.

Types of Weaves:
Kashmir Tweed can be woven in various patterns such as plain weave, twill weave, hopsack, herringbone, and houndstooth checks. The weaver can experiment with different colors, twisting woolen strands together to create multi-colored, multi-ply yarn, leading to unique color effects.

Artisanship:
The weaving of Kashmir Tweed is traditionally done by skilled artisans, particularly in the Kashmir Valley, where the craft is passed down through generations.

Special Characteristics and Quality Parameters of Kashmir Tweed

- Fabric Composition: Coarsely-woven wool yarn, primarily from sheep native to Kashmir.
- Breathability: The fabric has low breathability, making it suitable for colder climates.
- Moisture-Wicking: Kashmir Tweed has medium moisture-wicking abilities, which help manage moisture but do not make the fabric highly breathable.
- Heat Retention: The fabric excels in heat retention, making it ideal for cold weather.
- Stretchability: The fabric has low stretchability, meaning it retains its shape and structure well.
- Prone to Pilling/Bubbling: Kashmir Tweed is highly prone to pilling, which is common in wool fabrics.

Common Uses: Kashmir Tweed is widely used for making traditional Pherans (long winter coats), jackets, pants, hats, trench coats, blazers, and other types of outerwear. It is primarily used in winter clothing, including suit jackets and other warm garments.

F) Description:

Tweed is a virgin wool product that envisages at least eight steps from shearing the wool to finishing the final product and all the processes are manual.

Kashmir Tweed is 100 per cent wool unlike the one produced in the rest of India where it has also viscose in it. Manual weaving makes it a much stronger fabric and fine, unlike the mechanical weaving. Available in a variety of textures, such as checkered, herringbone, plain, striped, hopsack, matte, hondse tooth. It also comes in different colours and can be lightweight or heavyweight.

In Kashmir, Tweed is Tailored into long winter coats (Pheran), blazers, jackets, suits, waistcoats, trousers, shooting jackets, caps and even wedding suits. Apart from providing good insulation during winters, it is also a flourishing form of art and craft in Kashmir.

Tweed cloth is available across the globe. In Kashmir, it has been in the market for centuries for which Kashmiris have won a great reputation as artisans, and were celebrated in the old days for their skill in art manufactures. The home spun (Tweed-Pattu) is often the well-worn blanket of villager. The best wool in Kashmir is found in north where grasses are good; the best weavers are found in south.

Widely accepted as both formal and informal wear, Tweed is durable, intricate in its design and lasts longer than other fabrics. The various forms of Kashmir tweed inter-alia include:
Forms of Kashmir Tweed:

a. Pattu, a rough tweed like material produced in a variety of weights and widths.
b. Kalami Pattu, a Pattu which is a superfine quality in a plain weave called Kalami Pattu, the surface of which was so smooth that it was claimed possible to write on it with a pen.
c. Chadars, a form of tweed which display a wide variety of designs according to the areas in which they are woven.
d. In a single village, in Tillel a remoter side valley of Gurez, Rawa type chadars are made using yarn colored with local vegetable dyes, then there is the rawa design-big, black- and -white multiple checks, and thirdly, the charmingly named Chashm-bulbul-small, fine checks.
e. Kandidar Chadar, a form of Tweed specially bordered is their most distinctive feature. The finest Kandidar chadars are said to come from the Bandipora area of Kashmir valley.
f. The Shupiyan wide blankets (ekbari) are sold according to quality and fineness and khudrang blankets, made at Turkwangam.
g. The Tweed made in Gurez area of Kashmir has certain characteristics as:
    i) Showdar: In this morewhite color pashm/wool is used with narrow and running broad lines.
    ii) Dabdar: In which narrow squares and rectangular boxes with small centre gap pattern.
    iii) Kewdar: In which more black color pashm /wool is used with narrow and running broad lines.

The Tweed fabric is woven in Gurez besides two clusters have been established one at Nadihal, Bandipora and another at Inder, Pulwama where in as many as 560 families are involved with the sector.

G) Geographical area of Production and Map as shown in page no:

Geography of Inder,Pulwama, Nadihal,Bandipora and Gurez(The Cradle of Tweed Weaving in the form of Pottu and Chaddar)

Inder Pulwama:
According to Census 2011 information the location code or village code of Inder village is 003154. Inder village is located in Pulwama tehsil of Pulwama district in Jammu & Kashmir, India. It is situated 7km away from Pulwama, which is both district & sub-district headquarter of Inder village. As per 2009 stats, Inder village is also a gram panchayat.

The total geographical area of village is 163.9 hectares. Inder has a total population of 2,275 peoples, out of which male population is 1,181 while female population is 1,094. Literacy rate of inder village is 53.98% out of which 61.13% males and 46.25% females are literate. There are about 347 houses in Inder village.
The Tweed weaving in Inder, pulwama has been encouraged by the Department of Handicraft and Handloom and in this regard a Tweed cluster has been promoted wherein almost 38 families are associated with the tweed weaving directly. The area is famous for its intricate designs and high quality finished tweed and chadars made of 100% of the Kashmiri wool.

The village is comprised of four hamlets namely Malikpora, Dalipora, Chattapora and Dangarpora. Initially it was Tehsil Headquarter. In order to bring "Knit together" all the four hamlets in the shape of town, it was formed into a village. To "Knit together" has been described as Pnawan in Kashmiri language. It is why that it has been named as Pnawangam (Gam is word for all Kashmiri villages) which later on deshaped and became Pulgam and then Pulwama, which is at the tip of the tongue of the people.

The District is centrally located in the valley of Kashmir. The economy of the District mainly depends on the Agriculture Sector. The Jammu and Kashmir in general and district Pulwama in particular is ideally suited for sheep and goat rearing owing to its agro-climatic conditions and plenty of grasslands, lush pastures and orchards available.

The District is reported to be one of the pretty spots on the earth, because of its congenial climate, innumerable springs, streams, waterfalls, fragrant flowers, delicious fruits and other natural sceneries. Besides District Pulwama is famous all over the world for saffron cultivation which is mainly grown in Karewa lands of Pampore, Kakapora and Pulwama blocks of the district.

Nadihal Bandipora:
Nadihal village is located in Bandipora tehsil of Bandipore district in Jammu & Kashmir, India. It is situated 5km away from Bandipora, which is both district & sub-district headquarters of Nadihal village.

Bandipur is the only one amongst the several areas to have been chosen by the Handloom development corporation for projects which aim at widening the range of traditional skills to encompass fabrics with definite market potential (Report from the book Crafts of Jammu and Kashmir Ladakh by Jaya Jaitley page no:40). Pride of place is the officially sponsored programme of Handloom development in which manufacturingof export qualitywoollen Shawls, tweed, Dussa, Stole etcis done that not only is treasuring local wool which is procured by the corporation and thereafter are prepared under commercial conditions. A wide range of designs have been developed, suitable for production on the fairly simple looms in use-plain weaves and hopsacks, twill and herringbones, plain and houndstooth checks-many of which pose an attractive challenge to an accomplished weaver and offer him the chance to extend his skills. (Report from the book Crafts of Jammu and Kashmir Ladakh by Jaya Jaitley page no:43).

According to a survey published in Indian Journal of Hill Farming regarding Socio-Economic Profile of Sheep Rearing Community in Bandipora District of Jammu and Kashmir, it was found that apart from agricultural activities sheep rearing is also an activity carried out by people of both Nadihal and Gurez, predominantly in Gurez (68.33%) because of presence of enough pasture lands for grazing of sheep. This way Local wool is procured from sheep breeders so that to use it for making hand spun yarn and later hand weaved into famous tweed fabric (Pottu and Chaddar). Merino is available from the local market. Merino wool for tweed can be

purchased in hand spun form at 1,200 per kg, and mill spun at Rs 900 per kg. Local wool hand spun is available at 600 per kg, and mill spun at Rs 400 per kg. The wool from sheep is later hand spun into threads and ultimately hand weaved into tweed cloth. In most areas the sheep are shorn twice a year, and the wool from the autumn clip have a longer fiber length is received exclusively for the warp, while the less durable and shorter fibred spring-sheared wool is used for the weft.

In Bandipora the craft is concentrated in some villages like Qazipora, Nadihal and Watrina where most of spinners and weavers are found in abundance. The Government has started a project in the name of Bandipora woollen cluster, funded by world bank having Ranga sutra as implementing agency. Bandipora Wool Cluster, is an integrated cluster development project seeking to restore and strengthen livelihoods of artisans. Bandipora cluster is home both to sheep rearing, and to rich craft skills that have grown around wool as the raw material. The project aims to draw on these factors, to execute end to-end cluster development in the area. As the executing agency, ranga sutra envisages an integrated approach, working with artisans to build a resilient and dynamic producer organization that will capitalize on local resources and skills, be able to secure orders from the local, national and global market, and execute them successfully. The Bandipora Wool cluster is home to the traditional skills of hand spinning and weaving of tweed fabrics. The spinning of wool into yarn was originally done by communities rearing and herding sheep. With wool being commonly used by all in the cold climate of Kashmir, hand spinning of woolen yarn came to be practiced across communities.

It was often the elders with patience and time on their hands, who spun wool that was then used to make the textiles that kept everyone warm. The weaving of blankets, shawls, and heavy cloth used for making outer garments, was similarly a craft that came to be widely practiced. In these cluster artisans from different villages come here and indulge them in tweed weaving on modern wooden looms provided by government by getting suitable wages for their work. Traditionally, tweed weaving was for home consumption and weaving was practiced across all communities. Coarse fabrics and shawls were used for the family's needs, with very little going to the market. The establishment of the Handloom Corporation in the early 1980s, changed this scenario. Fly shuttle looms were introduced, and the Corporation gave weavers raw material and an assured market. The nature of handloom weaving changed to wage based, market-oriented production. Nadihal area is the hub of tweed weaving in Bandipora cluster. Kashmir Khadi Sangh, Manasbal Khadi Sangh and Kamraz Khadi are three local organizations located there, and engage an average of 15 weavers each. Besides the year round work they are able to provide their core weavers wages at their centralized production units, the organizations also engage additional weavers in home-based production when demand is high. The products woven comprise shawls, stoles, mufflers, chaddars, and fabric used for pherans and coats. A tweed artisan weaves around 15m per day, averaging a wage of Rs 200-250.

Gurez, or Gurais (*Guráai* in the local Shina Language), is a valley located in the high Himalyas, about 86 kilometres (53 mi) from Bandipore and 123 kilometres (76 mi) from Srinagar, to the north of the Kashmir Valley. At about 2,400 meters (8,000 ft) above sea level, the valley is surrounded by snow-capped mountains. It has diverse fauna and wildlife including the Himalayan bear and the snow-leopard. The Kishanganga river flows through the valley.

People in Gurez are involved in sheep rearing and later obtaining wool and Tweed Weaving from it. This Gurezi breed provides very soft wool for the hand spun yarn which is later weaved into pottu and chadder. These woollen clothes become suitable for the inhabited people considering the harsh climatic conditions in the region. Further it is also way of earning livelihood for the poor artisans working mostly during winter months. Tweed weaving is usually

practiced in Pulwama, Kulgam, Bandipore and Gurez. In Gurez following villages are well known craft concentrated areas:

		5)	**Sard aab**
1)	**Markoot**	**6)**	**Dangithal**
2)	**Chorwan**	**7)**	**Burnaie**
3)	**Dawer**	**8)**	**Kashpot**
4)	**Purana Tulail**	**9)**	**Zedgai**

Almost 197 families are associated with the Tweed craft.

The wool from Gurezi breed of sheep has characteristics which makes it compatible to get hand spun yarn and later weaved into traditional woollen clothes (Journal of Entomology and zoology studies).The Gurezi Sheep is the biggest among the Kashmir breeds. Animals are coarse woollen dairy animals, usually white and polled. These sheep have short ears and wool is predominantly white. However, a number of coloured sheep are also maintained for getting wools of natural shades of grey, black and brown. The animals graze rich grasses at 8000 ft in summer but are stall fed in winter. The wool yield is 1.250 to 1.500 kg per annum. The wool quality is medium fine about 6 inches long and lacking kemps (study by Directorate of Sheep Husbandry Kashmir).Climatic conditions will affect fiber diameter, so that in drought conditions the wool will become finer because of less nutritional intake and conversely in a season when food and water are abundant, the wool will become coarser. This is the reason that coarser fabrics like pattu and Blankets are prepared in Kashmir valley particularly in Gurez because of presence of pasture lands (Report from wool utilization project in Jammu and Kashmir in collaboration with UNDP & FAO). So, the well-fed animal although producing wool of slightly broader nature, it will be sound well grown and producing heavier cut per head.

Moreover, given the low temperatures, the yield of wool per sheep is also much higher than the average anywhere else in the country. However, due to a paucity of processing facilities, the bulk of wool produced is sold in raw form, and finds its way to other parts of the country. While J&K's output is 18% of the wool production of the country, the bulk of this, as high as 70%, finds its way to other states for processing and value addition.The Merino wool remains Jammu & Kashmir's Unique Selling Proposition (USP) as it is one of the finest kind of wool and the main raw material for weaving. The grading of wool in J&K is based on its fitness, length, color and feel. Average yield of wool per sheep in J&K is around 2.28 kg which is much higher than the national average of around 1.39 kg. (J&K Wool Processing, Handloom and Handicraft Policy 2020).The topography makes the climate of Gurez very harsh in winters, usually temperature dips down to almost -15 degree centigrade coupled with heavy snowfall which prompted the people to largely remain indoor. This opportunity is used by locals to make a kind of cloth or cover so that to combat the extreme cold temperature. For this the skilled people use the wool of local Gurezi sheep and hand spun it into long threads of yarn and later weaved it into twee thick cloth namely Chadar and pattu so that to protect themselves from cold harsh winters.

Tweed in the form of Chadar and pattu is still practiced in Gurez and Nadihal Bandipora area. This Woolen cloth is pure hand woven traditionally. The Artisans who are associated with this craft are fully skilled and inherited this craft from their ancestors since ages (source: Primary data collect by interview). A common feature, however, is that none of the wool is dyed and the different designs are achieved by a judicious selection of various natural shade. Some are plain and unpatterned, then there is the rawa design-big, black-and -white multiple checks, and thirdly, the charmingly named Chashm-bulbul-small, fine checks. Not all the Gurez fabrics are woven in sufficient widths for chadar to be made up of only two, sometimes three have to be stitched together. Strangely enough, in a single village, in Tillel, an even remoter

side valley of Gurez, Rawa type chadars are made using yarn colored with local vegetable dyes. The Chadars are easy to confuse with the very similar ones woven in Kishtwar, through the same style probably evolved independently in the two widely separated areas. A small remote village in Gurez namely Jawdara is making special designed pottu known by the name jawdara pattu which is extremely famous in Gurez considering its different and unique designs. The attractive bold designs of the Kishtwar and some of the Gurez Chadars make it unnecessary for them to have contrast selvedge or borders. In this way they differ from the village Chadars of the Kashmir valley, which are known as Kandidar, bordered, in reference to their most distinctive feature. The finest Kandidar chadars are said to come from the Bandipora area, where the mohallas of Nadihal Kazipora and Papchal were famous for them, and where the weavers mainly belonged to the Shah, Syed and peer communities (Report from the book Crafts of Jammu and Kashmir Ladakh by Jaya Jaitley page no:40).

Today in Bandipora, manufacture of fabrics is being encouraged by the Government's Handloom department project Bandipore but within certain modifications of the traditional methods. Mill spun yarn is now supplied to weavers who are also given fly-shuttle looms. This makes it possible for them to weave in 134 cms widths and to produce a chadar in two to three days, as opposed to the seven to ten days it takes on the old throw and catch looms. Villages equally famous for their chadars are Hanwara,Magam,Tarzoo and Sopore.

As different variety of wool is locally available which comes from local sheep breeders. The wool of different varieties is used for making different woollen fabrics. Local wool is sent for spinning locally using charkha or outside for machine spinning. The colouring or dyeing occurs either after yarn or on wool. Local sheep of varying colour also act as natural dyes e.g. black, white or brown. The quality of wool depends on:

- Percentage of wool or composition of wool
- Count (The more the count means fineness)

In case of having an option to have count in range of 8 -22nm, wool from local sheep is preferred. The type and thickness of wool determines the nature of woollen cloth to be manufactured e.g.

- 8nm-12nm (coarse count): Generally used for weaving Chaddars, Tweed coat, Tweed pheran etc.
- 12nm-32nm: Generally used for weaving trousers, socks, Dussa etc
- 32nm-46nm: Generally used for weaving shirts, mufflers, chunnis etc.

The higher the count the more is fineness and consequently lighter clothes are weaved. But for Tweed weaving yarn of less count preferably 8nm is used which is obtained from wool procured locally from sheep breeders.

Tweed is traditionally woven of local sheep's wool, tweed fabric today is made using either local or merino wool, often with synthetic blend. A thick and water-resistant fabric, it is ideal for outer garments – the traditional Kashmiri pheran, or modern-day coats and jackets.

Tweed fabric is typically available in 15m rolls or thaans. A thaan of local wool is priced around Rs 6,000, while a merino than goes for Rs 9,000. Tweed looms are also used to weave a range of shawls and stoles, that go by the name of tweed products. Local sheep's wool, which is coarser and warmer than merino, is typically made into large shawls or blankets that help combat the severe local winters:

Chaddar Single 55”x100” Price Rs 2,500
Chaddar Double 55”x198” Price Rs 6,000
Merino, with a softer and lighter feel, is used for stoles and shawls in the everyday wear category:
Ladies Stole 30”x80”
Ladies Shawl 45”x80”
Burdar 55”x100”
Dussa Single 55”x100”
Dussa Double 55x 198”

In Kashmir, Tweed has been in the market for centuries. People associated with the fabric suggest that though there is not much difference between the famous Harris Tweed and the Kashmir Tweed, the latter could not take off much because it lacked the proper branding. It survived because of the local market that included some of the winter belts in northern Himalayan belt. Industry insiders suggest the Kashmir tweed has a bright future if the policymakers manage just a fraction of the winter market across the globe and there is a need to give it a legal protection in terms of Geographical Indications so that the product is saved from fake woollen products where yarn is synthetic and procured from outside Kashmir. Kashmir tweed sells at a fraction of what Scottish tweed demands in the global market though there is not much of the difference in the quality of the wool and its texture. Proper branding can help create a huge market.

The work of producing Pottu and Chadar in Kashmir is just seasonal. Further the technique and looms are pure traditional and does not produce at a level which can cater to national and international market. This product is somehow catering to local market only. But this does not mean that these woollen products do not have enough potential to cater national and international market.

In Inder,Pulwama and Bandipora woollen cluster, different artisans from different areas are working and producing the woollen clothes on a good scale which cater local, national and international demand.

Further artisans are also producing good quantity as traditional looms got replaced by fly-shutter looms. The market for tweed fabrics is mostly domestic. About 40% of the tweed produced is absorbed within Kashmir. Srinagar is an important destination. Government and khadi establishments are the major retailers of tweed. Beyond Kashmir too, it is their marketing network that retails handwoven tweed in the wider domestic market.

H) Proof of Origin (Historical records):

Historical Development of the Kashmir Tweed

The history of Kashmir and its craft are interrelated with Geographical nature of the valley and are much related to its physical features. As we know Kashmir is bounded by beautiful Himalayan mountains thus giving it some sort of isolated character. These terrains separate it from central Asia. The valley of Kashmir is connected to some parts only through some passes, the famous one being on north west side called as silk route.

Under these Geographical conditions the people of Jammu and Kashmir took up arts and crafts as a serious source of livelihood. They also specialized in crafts that needed concentration, isolation and patience. By the 19th century Kashmir was renowned for its unparallel artistic

skills.Kashmir which is known as the paradise on earth is such a fertile land in whose womb cultures have taken their birth and art has touched its zenith. Jammu and Kashmir is such a name which has left its mark in every single space of earth because of its various art forms. Various dynasties which have ruled this land have left their indelible mark due to their varied art and craft. The Shahmiri Sikhs, Mughals and Dogra art form have become the identity of this land.

These dynasties which came from distant places of globe also brought with them ubiquitous art forms which assimilated here and evolved with the time. References to woollen shawls appear in texts surviving from between the 3rd century BC and the 11th century AD. However, a popular notion in Kashmir is that it was the 15th-century ruler of Kashmir, Zain-ul-Abidin, who founded the local wool industry by bringing weavers from Turkestan. The contacts between Central Asia and Kashmir increased during the reign of Zain-ul-Abdin as he had experienced the glory of Central Asia in person. Central Asia was then ruled by Timur who had collected in his capital skilled artists, craftsmen, writers and philosophers of countries conquered by him and none of them were permitted to cross the Amu Darya or to leave the imperial capital, without special permission of the Amirvii. During his stay in Samarkand, the prince moved freely in the city and became deeply impressed by the work of craftsmen. On his return to Kashmir, he brought a few artisans with him and when he ascended the throne, he sent emissaries to Samarkand and Bukhara to persuade the artists and craftsmen of these lands to come to Kashmir and settle in his court, thus laying the foundation of the crafts of Kashmir on the pattern of the settled crafts of Central Asia. The great monarch was so deeply involved in the development of these crafts that whenever a travelling artist or a craftsman from Iran, Khurasan or Turkistan passed through the Valley, he would induce him to teach his people whatever he knew and often he would not permit him to leave until he had done so. Sultan Zain-ul Ab din also took pains in persuading the rulers of Persia and Central Asia to extend their help in re-modelling Kashmir after Persian and Central Asian culture and at times sent some intelligent persons, mardan-i-zirak, to some industrially renowned centers of these places to receive training in different arts. Because of these efforts a number of Central Asian artists and craftsmen were able to stay in the Valley and teach the locals to make newer crafts like multi heddle looms for silk weaving, wood carving, enamelling, stone cutting, stone polishing, bottle making, window cutting (tabadan-turash), calligraphy and book binding, carpet making and above all the unique and extraordinarily beautiful art of shawl making. It can be deduced with a fair degree of accuracy from Pundit Srivara's account that Zain-ul-Abdin introduced multi-huddled looms from Central Asia or Khurasan. As reported also in Economy of early Kashmir by Suman Jamwal that Buddhist literature and jataka stories had mention of woolen blankets woven in Gandhara and Kashmir regions.

As reported in Trade and commerce during Dogra rule in Kashmir by Ali Mohammad Dar page no 58-60 those peasants of Kashmir who used to go to the Punjab for labour in winter and took their homemade Lois and Pattus for sale. But their number is not taken in the account due to prevalence of cholera in Kashmir during 1907-08. As a result of this there was great export of these articles during succeeding year i.e., 1908-09. Moreover, the occurrence of plague in Jammu restricted the influx of Kashmiris and thereby affected the trade of woollen products. In the same book titled Trade and commerce during Dogra rule in Kashmir by Ali Mohammad Dar, it is mentioned that export trade of Kashmir was of higher value and greater volume than its import trade. Obviously, Kashmir had more to export to Jammu than Jammu could manage to export to the valley. This imbalance in the trade was mainly due to production of woollen articles of which Kashmir had better capability than Jammu, also enhanced the value and volume of its export trade. For, as we seen during the winter months a large number of

Kashmiri agriculturists travelled down to Jammu and while doing so, they brought with them pattus which they themselves had prepared.

Tweed weavers in Kashmir are involved in making traditional shawls – mostly worn by men. The edges have a different color border while the weave is plain. Tweed fabric can be ideal for garments in different weights. Twill weave is ideal to use for garments as the weave gives a softer feel to the fabric, while the play in the warp and weft allows the garment to fit more comfortably. Though some plain fabrics can be developed so that they can be used as base fabrics for embroidery, most fabrics would be a nice visual mix of plain twills, herringbone, broken twills etc.

Tweed cloth is available across the globe. In Kashmir, it has been in the market for centuries.

As mentioned in Walter R Lawrence book the "valley of Kashmir" (Chapter XV /Industries and commerce page no.370) that Kashmiris have won a great reputation as artisans, and were celebrated in the old days for their skill in art manufactures. Every Kashmiri seems to excel as a weaver and the home spun cloth woven by villagers in the winter is highly appreciated both by Europeans and visitors. The home spun (Pattu) is often the well-worn blanket of villager. This statement in Walter R Lawerence's book clearly indicates the usage of hand spun and hand woven clothing in Kashmir has been since decades. Initially produced in parts of south Kashmir, mostly in the Pulwama district, a number of areas in Kashmir periphery adopted this art, now it is being produced in parts of north and central Kashmir like Bandipore and Budgam as well.

As reported in Jaya Jaitely's book (p.no 31) that spinning and weaving are closely related to the life of the Kashmiri farmer. While carrying on with household or agricultural chores women continue to spin yarn. Men weave heavy chadars during cold winter months when outdoor activity is restricted. The use of tweed in Kashmir is synonymous to coming of winter. In this season rural people clothed themselves in pattu, a rough tweed like material produced in a variety of weights and widths, and in winter they wrapped themselves in blankets of a number of different designs, each characteristic of the area where it was made. While the local Pattu was woven in all the hill regions of the state in a great variety of weights and qualities, the most famous was that produced in Sopore. This variety apparently commanded more in the local markets, since it was said to be in demand for military uniforms during the second world war.

The special quality of this Pattu was its compact weave and the fine quality of the local yarns, mostly in natural colours through vegetable dyes like walnut bark were occasionally used. It was woven in twill, typically in 60 cms width. In addition to the ordinary Pattu there was a superfine quality in a plain weave called Kalami Pattu, the surface of which was so smooth that it was claimed possible to write on it with a pen. This was fine enough to make turbans for the richer farmers, and was also used for leggings. Sopore Pattu was produced mainly by the somewhat depressed communities of Hajams, Wanis and Shalas. Unlike weaving which was somewhat specialized work which was carried on by only a few families, the craft of spinning was and is done by womenfolk of virtually every household in the mountainous region of Jammu and Kashmir.

In Kashmir proper, indeed, the usual connotation of the word "Handspun'' to imply something rough and coarse though serviceable, is entirely inappropriate; for as A.F Barker noted half a century ago in The Cottage Textile industries of Kashmir, the village weaver has at his command probably the finest hand spinning skill in the world. In the whole Kashmir and Ladakh, weaving is exclusively man's work though it is not a full-time occupation nor confined

to a particular community like other skilled occupations. Weavers are ordinary farmers who spend long days of summer working in their fields, but who also exercise this hereditary skill largely in winter months. During this time, they make cloth for themselves and their family use, and also do so as a village service on payment, taking in their neighbours yarn and returning it to them in the shape of Pattus or chadars. (Jaya Jaitley's book Crafts of Jammu Kashmir and Ladakh page no.36/37). The other main product of the village looms, the chadars, display a wide variety of designs according to the areas in which they are woven.

The Tweed has also been mentioned in the J&K Wool Processing, Handloom, and Handicrafts Policy 2020:
"The Handloom sector has a unique place in the socio-economic structure of Jammu and Kashmir. The sector provides direct and indirect employment to more than 40,000 weavers and ancillary workers in J&K, mostly belonging to SC/ST, backward and economically-weaker sections of the society. Jammu and Kashmir is famous for weaving of specialized fabrics like Pashmina, Kani and Raffle Shawls, Blankets like Lois and Chashme Bulbul, cotton and Arabian Rumals and **Tweed** and Linen fabrics.**"**

The tweed has been mentioned on www.esamskriti.com under culture traditional textiles india handlooms of jammu and kashmir as "Men's pherans are always made of tweed or coarse wool; women's pherans, somewhat more stylized, are most commonly made of raffel, with splashes of Aari or hook embroidery at the throat, cuffs and edges. The quality of embroidery and thickness of the raffel determines the price."

The tweed finds its place on a prominent Indian trade media platform, serving the Indian and worldwide textile, garment, fashion, and retail industries. TVC is a major player in the business, offering a monthly print magazine, an e-magazine, an e-newsletter, and an online worldwide information and sourcing platform.

"Tweed is a pure wool product that goes through eight steps of wool shearing to take various shapes. Products of Tweed are available as long winter coats, jackets, blazers, waistcoats, suits, trousers, caps; also wedding suits. Apart from providing good insulation during winters, it is also a flourishing form of art and craft in Kashmir."

I) Method of Production:

Typically, Tweed production involves sequence of jobs which are:
1. Processing/procurement of the raw material.
2. Washing and dyeing of wool.
3. Cleaning and spinning of yarn.
4. Warp arrangement, dressing and threading.
5. Weaving of Tweed.
6. Finishing of Fabric.
7. Washing.

Detailed Process of Tweed making:
Traditional process
For tweed weaving by traditional process, pit loom is used, 'Pit Loom' is a type of old wooden loom that the weavers make to perform weaving using pedals which are placed in the pit in a manner you can sit while doing the weaving. Often the pit loom base is much stronger than the handloom, and usually, once the pit loom is assembled in a place then it can't be moved to any other place. In Kashmir proper, warping is done by means of pegs stuck in the ground; only in

Gurez pegboard attached to a convenient wall. The reason is that in this remote high-altitude valley, the short summer has to be exclusively devoted to work in the field, and the entire weaving process must therefore be done indoors during the six snow bound winter months.
The process of preparing the wool and spinning it into yarn for weaving is same as for shawl making. The process of weaving the Tweed fabrics is described below in following stages. The production process of traditional Kashmir Tweed is as follows:

1. Procuring the wool. 2. Preparing the wool. 3. Spinning the yarn. 4. Dyeing.
5. Arranging the warp. 6. Weaving of fabric. 7. Washing.

Stages of production
Procurement of raw material:
Wool is procured locally from sheep breeders which is sheared from different sheep breeds reared in Kashmir. This process begins with removal of fleece from the sheep. The act of cutting or removal of wool from the body of sheep is termed as shearing. Sheep are washed at least two days before shearing in order to remove dirt, suint and grease which hinder shearing. Shearing is generally done twice a year in Kashmir during spring and autumn months.

Sheep make a valuable contribution to the livelihood of the economically weaker sections of the society especially in the mountainous areas by its multifaceted utility of producing wool etc. Wool is an important product of sheep which continuously grows on it and its utility and value depends upon its quality. J&K not only is the second highest producer of the wool in the country but it also produces different types of wool and in varied quantities. Different sheep breads are reared in the UT for wool and meat purposes as per the details of sheep husbandry department Kashmir, the number of abstract sheep farmers in Kashmir division is 70033 and number of sheep are 1912611. People also opt for back yard sheep farming which are mostly not registered with the Department, as such the actual number is believed to be much higher.

Due to agro climatic conditions and alpine pastures of the valley, sheep rearing is a common. Different Sheep breeds are reared in Kashmir Valley from which wool is obtained. The wool so obtained is accordingly graded for different purposes. A small snapshot of different sheep breeds along with quality of wool is given below (Source: Department of Sheep Husbandry, Kashmir/Food and Agriculture Organization the of United Nations):

The fibre fineness and the staple length are two very important characteristics of the wool determining its value and utilisation. The finest wool with good staple length is used in the worsted system of yarn production and for manufacture of best quality suiting. Kashmir Merino developed in Kashmir is a fine wool breed of sheep comparable to the best wool breeds of the world. Its wool diameter of 21 to 22 microns which is considered as the best by all standards.

The Gurezi Sheep is the biggest among the Kashmir breeds. Animals are coarse woollen dairy animals, usually white and polled. The majority of sheep are hornless. However, a number of coloured sheep are also maintained for getting wools of natural shades of grey, black and brown. The wool yield is 1.250 to 1.500 kg per annum.

The wool quality is medium fine about 6 inches long and lacking kemps (study by Directorate of Sheep Husbandry Kashmir). Moreover, given the low temperatures of high-altitude areas of Kashmir like Bandipora, Gurez, the yield of wool per sheep is also much higher than the average anywhere else in the country and hence people are engaged in sheep rearing and consequently wool is sheared. However, due to a paucity of processing facilities, the bulk of wool produced is sold in raw form, and finds its way to other parts of the country. While J&K's

output is 18% of the wool production of the country, the bulk of this, as high as 70%, finds its way to other states for processing and value addition. (J&K Wool Processing, Handloom and Handicraft Policy 2020). As reported in D.N Saraf's book "Art and Craft Jammu and Kashmir "that Kashmir has 12-15 lakh sheep,50% of which have improved in breed. Production of wool is estimated between 18 -22 lakh kg. The wool apart from available locally is also procured outside in different forms like merino wool etc.

1. **Preparation of the Raw wool**

   At this Stage, the raw wool is greasy, lumpy, discolored etc. mixed strong hairs with impurities like dung, dirt and even pieces of skin. The first step is manual removing of all organic wastes and the strong coarse hairs which weigh around 1/3rd of the total weight. Then this wool sorted and graded. The fleece is sorted into grades by master weavers with a keen touch. The fibers are sorted according to fineness, length and colour. After grading, wool is carded. The Process of disentangling, cleaning, intermixing fibers to form a continuous web. The soft wool thus obtained is prepared for spinning by continuous kneading over a fixed comb called Kangni, till there are no lumps and the wool is evenly soft and fluffy.

2. **Spinning the yarn**

   Then this wool is spinned with the help of Charkhas **(Yeinder).** The Process of drawing out fibers from a mass and twisting them together to form a continuous yarn. This yarn can also be doubled to increase its tensile strength. In Gurez usually for spinning of yarn, special piece of wood made from juniper wood called as **"chakoo**" is used for spinning of wool. The wool is spun on traditional charkhas called Yeinder. Traditionally every household in Kashmir possess Yeinder. There was a time when it was given as a gift to the bride by the family. The Yeinder consists of a spinert, a fine iron rod pointed at one end with a detachable piece of grass on which yarn gets wound. As the handle is rotated, the iron spinert rotates and the wool is twisted into yarn as it is drawn from the tufts from the hand of the spinner. A certain amount of twist is imparted when required by the practiced spinner. For Kashmir tweed making spinning is done by both with the help of Yeinder in Kashmir and also by local Gurez people by **"Chakoo".**Further to provide tensile strength to single ply yarn,this yarn is doubled with the help of local instrument called as **"Hanji".**

3. **Dyeing**

   The Yarn according to design is given to dyer (Rangrez), the dyer, though some of it may be retained undyed for weaving fabrics of natural shade. The yarn is dyed in various colours and quantities in the dyeing factories. The dyers constitute separate class of workers and are very proficient in dyeing yarn with brilliant colours.

   Wool and yarn are also dyed using strawberry roots and walnut bark available locally in the forests of valley. The process of Dyeing consists of soaking the yarn in boiling water mixed with specified proportion of dye material. An acetic acid solution is also added.

4. **Warping**

   Then this yarn has to be installed on pit loom, this is possible only through process of warping. In traditional process usually ground warping is done and this warp is then installed on loom for weaving. In warping warp maker adjusts dyed yarn for the warp according to the different colours and quantities of yarn required for the design. The number of warp threads is based on the width of the fabric and fineness of the weaving to be done. The number of threads used is based on following formula:

Number of Threads=Total width *Reed Number
e.g., if 45-inch width fabric is to be made with reed number 30, then
No. Of Threads=45*30=1350 Threads
Warp dresser winds the threads in a sequence around rods fixed in straight row and the prepared warp is dipped into a hot solution of boiling rice water, squeezed, brushed and dried, leaving each thread stiff and set apart from each other.

The yarn is wound around the warp beam before being given to the warp threader who passes it through the 4 Heald shafts. The weavers later on fix it on to the loom. Generally, it takes time usually one day to prepare the warp. Twisted warp is made up of double yarn while the weft consists of single but thicker yarn. Nowadays warping drum is used to do the warping which is an improvement over ground warping.

5. Weaving

The weaving is the process of interlacement of the warp and weft in a fabric according to design. A loom is a weaving machine having at least five motions categorized in primary and secondary motion. A loom is termed as handloom when it is actuated by human power. Every machine has certain motions or movements.

A weaving loom motions are classified into following:
1) Primary motion
2) Secondary motion

Primary motions are designated to those motions of weaving without which weaving is not practicable.
Secondary motions are also important but are second to primary motions.

The primary motions of weaving are:
a) Shedding
b) Picking
c) Beating up

The secondary motions are the following:
a) Take-up
b) Let-off

Finally, after ground warping, this warp is installed on loom and weaved into tweed cloth by moving paddles up and down and consequently woollen yarn is wrapped around “Baie” which is also called as **fly shutter** in existing process, a method of textile production in which two distinct set of yarn or threads are interlaced at right angles to form a fabric or cloth.

J) Uniqueness:

Kashmir Tweed is known for its unique and meticulous production process, which stands apart from modern industrial manufacturing due to its complete manual nature. The following aspects make Kashmir Tweed highly distinctive:

Wool Variety: Jammu and Kashmir is the second-highest producer of wool in India, known for a variety of local sheep breeds and the distinct wool they produce. The region's diverse wool varieties contribute to the rich texture and warmth of Kashmir Tweed.

Pure Wool Composition: Unlike tweeds produced elsewhere in India, which may include viscose (Rayon), Kashmir Tweed is 100% wool. This results in a stronger, finer, and more durable fabric, especially due to the manual weaving process, which enhances its quality.

Special Wool for Pottu and Chadar: Kashmir Tweed's unique products like Pottu and Chadar are made using special soft wool obtained from local sheep breeds such as Gurezisheep and Marino. The Gurez sheep, found in the alpine pastures of Gurez Valley, is particularly famous for its high-quality wool.

Climate Suitability: The products made from Kashmir Tweed, especially Chadar and Pottu, are designed to withstand the extreme cold of the Kashmir Valley. These woolen fabrics provide significant warmth, protecting locals from the harsh winter temperatures, which can dip below freezing.

Handmade Process: The process of making Kashmir Tweed, from spinning the yarn to weaving the fabric, is entirely manual. This gives the fabric its durability and mechanical strength, setting it apart from machine-made woolen products. However the machine spinning of the yarn is also practiced for the tweed manufacturing across various clusters in the region.

Natural Dyes: Wool and yarn are traditionally dyed using natural sources like strawberry roots and walnut bark, which are abundantly available in the Kashmir Valley. This centuries-old dyeing process adds to the uniqueness of the fabric and signifies the long-standing cultural practices associated with Kashmir Tweed.

Use of Traditional Tools: The weaving and spinning of Kashmir Tweed products are done using traditional tools made of locally sourced wood. These items, specific to the region, are key components in maintaining the indigenous nature of the craft.

Jawdara's Unique Design: The Jawdara village in Gurez is renowned for producing Pottu and Chadar with distinct designs. These designs are highly regarded in the market and carry the special identity of "Jawdara Pottu," making them a significant part of Kashmir's textile heritage.

Handcrafted Size Variations: Due to the manual nature of the weaving process, some fabrics are not wide enough to create a single Chadar. In these cases, two or sometimes three pieces are stitched together to achieve the desired length. This is a testament to the traditional techniques used, which have remained unchanged for centuries.

Trakhun and Chakoo: The spinning of wool is done using ancient tools like the "Trakhun" (in Kashmiri) or "Chakoo" (in Shina language), which predate the more modern spinning wheels (yender or charkha). These age-old instruments are part of the region's rich cultural heritage and further demonstrate the indigenous nature of Kashmir Tweed production.
The combination of manual craftsmanship, local materials, and traditional methods gives Kashmir Tweed its unique status and immense potential for both local and global markets. It reflects the deep cultural ties to the region and can provide substantial economic opportunities if supported adequately.

K) Inspection Body:

The process of creating a standard inspection body is under the legal process and certification to this effect will be issued by the appropriate agency in due course. However, the proposed structure of inspection and implementation of the GI is given hereunder:

- One representative from Development Commissioner Handicrafts, Ministry of Textile, Government of India
- One representative from Directorate of Handicrafts and Handloom, Kashmir
- One representative from Craft Development Institute, Srinagar
- One representative from Indian Institute of Carpet Technology (IICT)
- One representative from The Wirasat Handicrafts Industrial cooperation ltd.(Tweed Clusters Weaver Association)

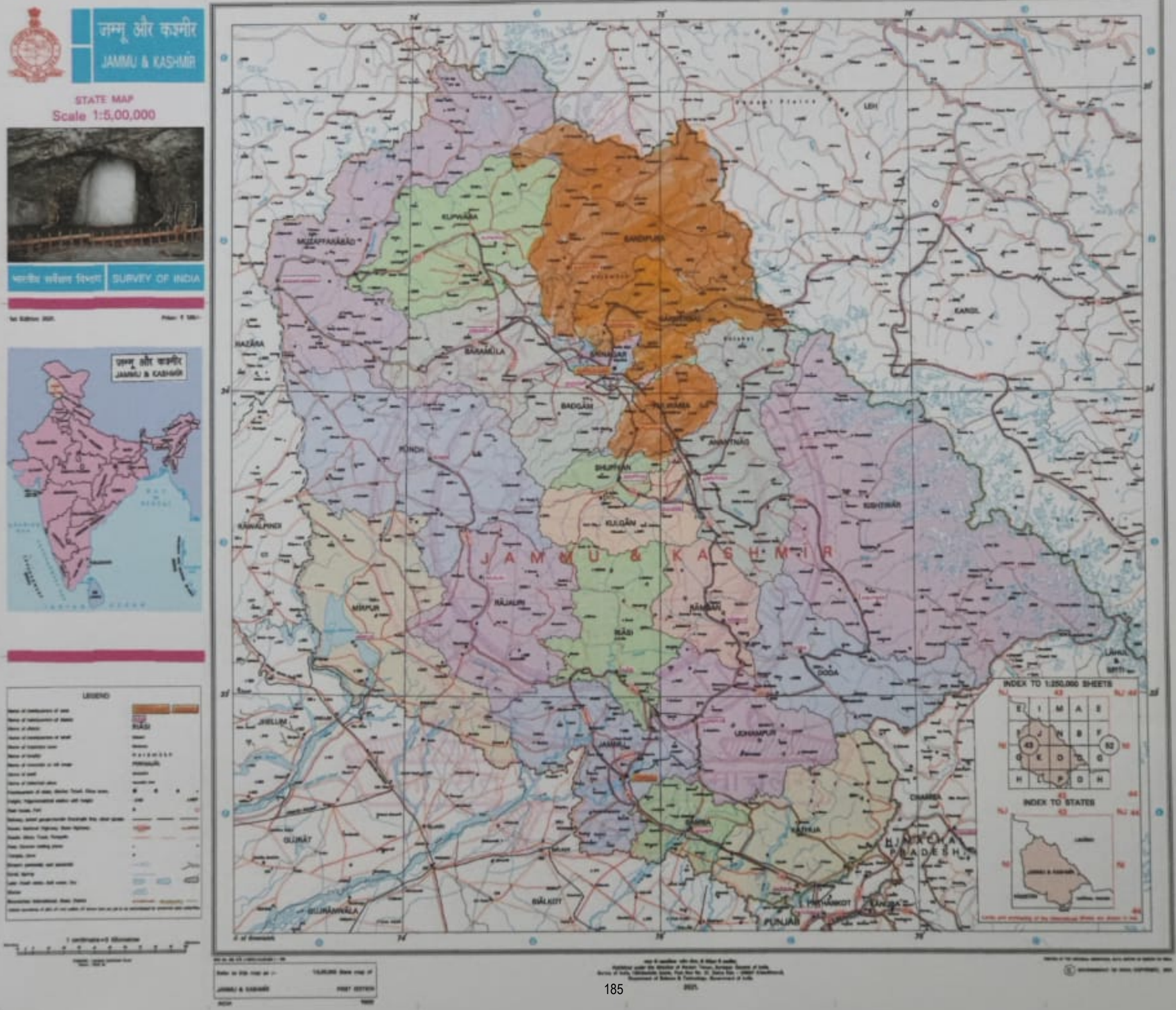
L) Others:

Tweed cloth is available across the globe. In Kashmir, it has been in the market for centuries. Initially produced in parts of south Kashmir, mostly in the Pulwama district, a number of areas in Kashmir periphery adopted this art to manage the requirements of the state-run Handloom Development Corporation that owns the impressive Poshish brand. Now it is being produced in parts of north and central Kashmir like Bandipore and Budgam as well.

Tweed is a virgin wool product tailored into long winter coats, blazers, jackets, suits, waistcoats, trousers, shooting jackets, caps and even wedding suits, tweed provides good insulation during colder days. However, in Kashmir, it can also be tailored into a traditional Pheran, the long loose gown that people use during winters and has been sold at length and breadth of Kashmir Valley.

Kashmir tweed has a bright future if it manages just a fraction of the winter market across the globe. Kashmir tweed sells at a fraction of what Scottish tweed demands in the global market though there is not much of the difference in the quality of the wool and its texture. Proper branding can help create a huge market and GI could prove a huge tool.

FOR KASHMIR TWEED



- BANDIPORA
- GANDERBAL
- PULWAMA.

Advertised under Rule 41 (1) of Geographical Indications of Goods (Registration & Protection) Rules, 2002 in the Geographical Indications Journal 199 dated November 29, 2024

G.I. APPLICATION NUMBER – 1062
Application Date: 24-02-2023

Application is made by Baruipur Farmers Producer Company Limited at Village: Himchi, Post: Nabogram, P.S: Baruipur, Distict: South 24 Parganas – 743 372, West Bengal, India for Registration in Part - A of the Register of **Baruipur Guava** under Application No. 1062 in respect of Guava falling in Class – 31 is hereby advertised as accepted under Sub-section (1) of Section 13 of Geographical Indications of Goods (Registration and Protection) Act, 1999.

A) Name of the Applicant : Baruipur Farmers Producer Company Limited

B) Address : Baruipur Farmers Producer Company Limited
Village: Himchi, Post: Nabogram,
P.S: Baruipur, Distict: South 24 Parganas – 743 372, West Bengal, India

Facilitated By:
1. Patent Information Centre (PIC), West Bengal State Council of Science & Technology (WBSCST).
2. West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL) under Department of Food Processing Industries and Horticulture, Government of West Bengal

C) Name of the Geographical Indication :

BARUIPUR GUAVA

D) Types of Goods : **Class 31** – Guava

E) Specification:

- **Baruipur Guava** is one of the oldest indigenous fruit varieties adopted specifically in Baruipur region of **South 24 Parganas districts of West Bengal, India.** In Bengali the Guava is popularly said as 'Peyara' and typically 'Baruipur Guava', native to Baruipur sub-division region of South-24-parganas district of West Bengal, is so fresh and tasty that it is well-liked throughout the state as well as outside of the state.

- The shape of the fruit Baruipur Guava is globose to obovate, bright green in colour when young and yellowish -golden yellow when ripen, & the size varies between 8-10 cm in diameter.
- The Baruipur Guava is considered to be famous amongst other guava fruits available in the state due to its important qualities and taste which are not found in other guava grown in West Bengal and in other states also.Taste of fruit is sweet, mineral & other nutrient contents are appreciable. Especially Baruipur guava is rich in antioxidant properties which range from 0.14 mg/ml to 0.26 mg/ml (IC 50)
- This fruit has potential trade value and is of consumers' choice because of its pleasant taste, juicy, crispy & pulpy texture.
- Baruipur Guava is consumed directly in raw form as all season fruits.
- Consumed as laxative purposes as the fruit contains rich amount of fibre.

The specific characteristics of Baruipur Guava plants are as follows:

Plant Morphological Characteristics:

- Baruipur Guava (Psidium guajava) is a shrub or small tree usually growing 1-8 m. tall, but occasionally reaching 10 m in height.
- Stem: The older stems are covered in a smooth, light reddish-brown, bark that peels off in flakes. This sometimes gives the trunks a mottled appearance, because the newly revealed bark is somewhat greenish-brown in colour. Younger stems are greenish in colour, pubescent, and somewhat four-angled (quadrangular).
- Leaves: Leaves are simple, oppositely arranged along the stems and are borne on short stalks (petioles) 5-8 mm long. The leaf blades (8-12 cm long and 5-7 cm wide) are somewhat ovate-elliptic or oblong-elliptic in shape with rounded tips and rounded (obtuse) bases. Mature leaves deep green in colour. Young leaves are pubescent (hairy) undersides, entire margins, and are generally pale green in colour. Each leaf has a prominent midrib and 12-15 pairs of lateral veins that are also relatively obvious.
- Flower: The flowers are usually borne singly or, occasionally in cymes (2-3 flowers / axil) in the axiles. Flowers are about 25 mm across and are borne on a hairy stalk (pubescent peduncle) 1-2.5 cm long. Each flower has four / five green sepals (6-15 mm long) that are fused together at the base and four or five white petals (10-20 mm long). They also have huge numbers (200-250) of small white stamens (6-10 mm long) and a style (6-12 mm long) topped with a stigma.

  Fruit: The Baruipur Guava fruit is either rounded (globose), egg-shaped (ovoid/ obovate) and turns from bright green to yellowish in colour when it matures. These berries (8-10 cm long) are crowned with the remains of the persistent sepals (calyx lobes) and have an off-white coloured pulp which is crispy & soft in nature, containing 45-85 seeds varying the size of the fruit. The seeds are pink to yellowish in colour and kidney-shaped (reniform).

F) Description:

Baruipur guava is popular as all season fruit among West Bengal. It is well known for its crispy, juicy pulp content and sweetend taste. The unique feature shows of particular round shaped structure and a big remarkable size (ranges from 8 cm to 10 cm). This particular variety of guava is adopted in Baruipur sub-division of South-24-Parganas districts of West Bengal.

Baruipur block is famous for production of Guava which is reputed due to its size and taste. Detailed description of the product in terms of its components, characteristics, types and

varieties with high resolution pictures of the product. Baruipur is a unique place of guava cultivation. Here many people depend on guava cultivation. New techniques of guava cultivation are now being used for increasing guava production.

The chemical constituents of the fruits are as follows:

Sl no.	Test Parameters	Unit	Test Method	Permissible limit	Result
1	Antioxidant assy by ABTS	None	MSK/TPM/AO/01	Not Specified	IC 50e/» 0.14mg/ml
2	Antioxidant assy by DDPH	None	MSK/TPM/AO/01	Not Specified	IC 50% 0.26mg/ml
3	Antioxidant assy by FRAP	None	MSK/TPM/AO/01	Not Specified	IC 50e/» 0.17mg/ml
4	Carbohydrate (by calculation)	g/100g	AOAC official method, 986.25	Not Specified	15.42
5	Energy	Kcal/ 100g	Pearson's Compositions and Analysis of Foods	Not Specified	71.76
6	Vitamin C	mg/ 100g	IS 5838: 1970	Not Specified	237
7	Protein	g/100g	IS 7219: 1973	Not Specified	2.52
8	Total Ash	g/100g	FSSAI Lab Manual 5	Not more than 2.5	0.34
9	Total Fat	g/100g	AOAC official method. 963.25	Not Specified	BDL(DL:0.2)
10	Total Polyphenol Content	%	AOAC official method. 976.35	Not Specified	0.23
11	Total Sugar	g/100g	FSSAI Lab Manual 10	Not Specified	7.41
12	Pectin	%	TPM/MSK/F/22/P	Not Specified	2.52

As per chemical analysis report:

- The property of Baruipur Guava to scavenge free radicals (ROS) was studied by using 3 different methods. Three common tests for measuring antioxidant activity were evaluated with the help of ABTS, DDPH, & FRAP assessment and the value ranges from 0.14 mg/ml to 0.26 mg/ml (IC 50)
- Total carbohydrate & protein content by calculation resulted 15.42 g/ 100g and 2.52 g/100g respectively.
- Baruipur Guava contains 71.76Kcal/ 100g energy as well as 237 mg/ 100g Vitamin C, which depicts the medicinal aspects of Guava also.
- Baruipur Guava showed appreciable amount of polyphenol contents (0.23 %) along with that the total ash content is much less than that of permissible limit, (not more than 2.5g/100g) which is 0.34g /100g
- Baruipur guava does not contain any trans-fat which is harmful to health. Experimentally observed fat content was below detection limit (Detection limit = 0.2 g/ 100g)

- Total Sugar and pectin content showed 7.41 g/100g and 2.52% respectively.

G) Geographical area of Production and Map as shown in page no:

Baruipur block is famous for production of Guava, which is renowned for its size and taste. Baruipur is a municipality area of of south 24 Pargana district in West Bengal. The latitude of Baruipur Block is 22°21'34" N to 22°28'N and longitude is 88°20'54" E to 88°38'E

Eight Village Panchayats (Hariharpur, Kalyanpur, Shikharbali, Nabagram, Shankarpur, Ramnagar, Madarhat and Dhabdhabi) among Baruipur were most famous for the production of guava.

Particulars of the district or the place:

Sl. No.	Particulars	
1	District	South 24 PGS
2	Latitude	22°21'34" N to 22°28'N
3	Longitude	88°20'54" E to 88°38'E
4	Population	11,345,126 (estimates as per aadhar uidai.gov.in Dec 2023 data).
5	Geographic Area	9,960 km²

H) Proof of Origin (Historical records):

W.W. Hunter a British author in his book 'A Statistical Accounts of Bengal' Vol. 1 published during 1876 by Trubner & Co, London also mentioned that cultivation of Guava in the region of South 24-parganas was very popular and the Guava was one of the most important fruit trees that time. (Annexure 4A)

In the paper "Present Status of Wilt Disease of Guava" by A.K. Misra and B.K. Pandey (1996) it is mentioned that the wilt disease was reported from guava orchards in West Bengal confined mainly to the region of Baruipur area of South 24 Parganas district.

Severe wilt was reported from guava cultivating areas of West Bengal which are mainly confined in Baruipur region of district of 24-Parganas (Chattopadhaya and Bhattacharya, 1968).

I) Method of Production:

Production of guava fruits depends upon climatic situation; 60 to 65 plants perhaps flourish in one bigha land. It can be picked when mature, light green in colour and firm. Out of total 30 Blocks of 24 Parganas (South), the Baruipur Block has the record of maximum production of guava per year.

Propagation:
Air-layering or marcottageing is the most widely used commercial method of propagation of guava in West Bengal. Upright branches (1-1.5 cm stem diameter and 30- 60 cm long) from well developed trees and free from pest and diseases are selected for marcottageing. Propagation by semi-hardwood cutting (Dhua et al., 1982) under mist with IBA (5000 ppm) and

P-hydroxybenzoic acid (200 ppm) and stooling (Dutta and Mitra,1991) with prior etiolation (for 10 days) and IBA (5000 ppm) treatment were also found successful. Stone grafting using wild root stalk are now popularising as the grafted plants are tolerant to guava wild, a serious disease of the crop.

Planting Density

In West Bengal, guava is planted in square system at a distance of 8×8 ft. Recent trend is planting at a closer spacing for obtaining higher yield per unit area. High plant density (400-800 plants) caused decrease in fruit weight and size but the yield per unit area increased considerably. Regular pruning and thinning are considered as prerequisites for high-density planting.

Rational Fertilization

The rate of fertilization depends on tree size, vigor, cultivar, spacing, cropping programme, climate and soil type. In West Bengal, young trees between 1 and 4 years of age were suggested to be fertilized with 30 g N, 60 g P_2O_5 and 30 g K_2O/plant/year of age while for trees older than five years, the N, P_2O_5 and K_2O rates were suggested as 260, 320 and 260 g/plant/year. Fertilizers should be applied in two stages, i.e., half of the dose in the month of June and remaining half in January.

Integrated nutrient management for bearing trees were also standardized. It is suggested to apply vermicompost 10 kg along with neem cake 5 kg and Azospirillium 20 g/plant/year in the month of August. These trees should receive foliar spraying of 3% urea, 1% Calcium phosphate (monobasic) and 2% muriate of potash two times in a year (June and October). Combined spraying of a micronutrient mixture of 0.3% Cu, 0.1% B and 0.3% Zn twice in May and September markedly improved fruit quality.

Land: Mild low land with square or rectangular shaped land with sandy loamy soil is required for guava farming. Land preparation required with ploughing, levelling and cleaning from summer season to before rainy season.

Climate: Guava is plain land climatic fruit; mild rainy season is required for growth of guava properly. It requires dry climate condition at the time of flowering.

Soil: Guava plants have adaptability with any types of soil. Production is not depending on fertile soil but required organic matter to grow properly. It is hardy fruit crop but cannot tolerate saline soil. It can grow well in light alkaline alluvial or lateritic soil. For good growth of trees well drained sandy loams to clay loams with 6.0 to 8.0 pH and less irrigated soils are best suited..

J) Uniqueness:

Baruipur Guava Characteristics

Appearance and Size: Baruipur Guava has a distinct bright green color with a rough texture on the peel, setting it apart from other varieties. Its shape ranges from round to obovate, with a larger size (typically 8-10 cm), making it visually appealing.

Pulp Quality: The guava is known for its juicy pulp, which is sweet and contains a high pulp-to-seed ratio. The fruit typically contains between 45 to 85 seeds, much fewer compared to other varieties, making it more enjoyable to eat.

Antioxidant Properties: Baruipur Guava is highly nutritious, offering substantial antioxidant properties. The antioxidant content ranges from 0.14 mg/ml to 0.26 mg/ml (IC 50), which is beneficial for health.

Geographic Specificity: This variety is specific to the Baruipur area in the South 24 Parganas district of West Bengal, where the unique climate and soil conditions contribute to its distinctiveness.

Disease Resistance: Baruipur Guava is comparatively less susceptible to common guava diseases such as guava wilt, making it a hardier option for farmers in the region.

Human Skill in Production

The cultivation of Baruipur Guava is deeply influenced by the skills of the local farmers. Every stage of production, from planting to harvesting, is done with human intervention. There is a strong focus on handmade or handcrafted methods, with no machinery involved in the process, making it a truly organic and traditional agricultural practice. This hands-on approach, combined with the farmers' special inputs, ensures the uniqueness of the guava and highlights the role of human expertise in maintaining its high quality.

Uniqueness of Baruipur Guava

Distinctive Appearance: Baruipur Guava stands out due to its bright green color and rough texture on the peel. Its size is larger compared to many other guava varieties, typically ranging between 8-10 cm in diameter. The fruit's shape is often round to obovate, giving it a unique visual appeal.

High Pulp and Low Seed Content: One of the most remarkable features of Baruipur Guava is its juicy pulp, which is sweet and rich in flavor. The fruit contains significantly fewer seeds compared to other guavas, with only about 45-85 seeds per fruit, enhancing its overall quality and making it more palatable.

Exceptional Taste and Sweetness: The pulp of Baruipur Guava is known for its sweet taste, making it highly desirable for consumption. The low seed count and juicy texture contribute to an enjoyable eating experience.

High Antioxidant Content: Baruipur Guava is also recognized for its high antioxidant properties, with an antioxidant value ranging from 0.14 mg/ml to 0.26 mg/ml (IC 50). This makes it a nutritious option for health-conscious individuals, offering numerous health benefits.

Geographical Specificity: This variety of guava is specific to the Baruipur region in the South 24 Parganas district of West Bengal, India. The unique soil and climatic conditions of this area contribute to the distinctiveness of the fruit, making it a geographically specific agricultural product.

Resilience to Diseases: Baruipur Guava is comparatively less susceptible to diseases such as guava wilt, which affects many other guava varieties. This disease resistance adds to its appeal and ensures more consistent yields for local farmers.

Traditional, Handcrafted Farming Methods: The production of Baruipur Guava involves a high degree of human intervention. It is grown using traditional, handmade methods with no machinery, making it an organic and handcrafted product. The local farmers’ expertise and

special inputs play a crucial role in maintaining the quality and unique characteristics of the guava.

These distinctive qualities make Baruipur Guava not just a fruit, but a unique agricultural product that reflects the craftsmanship and environment of its native region.

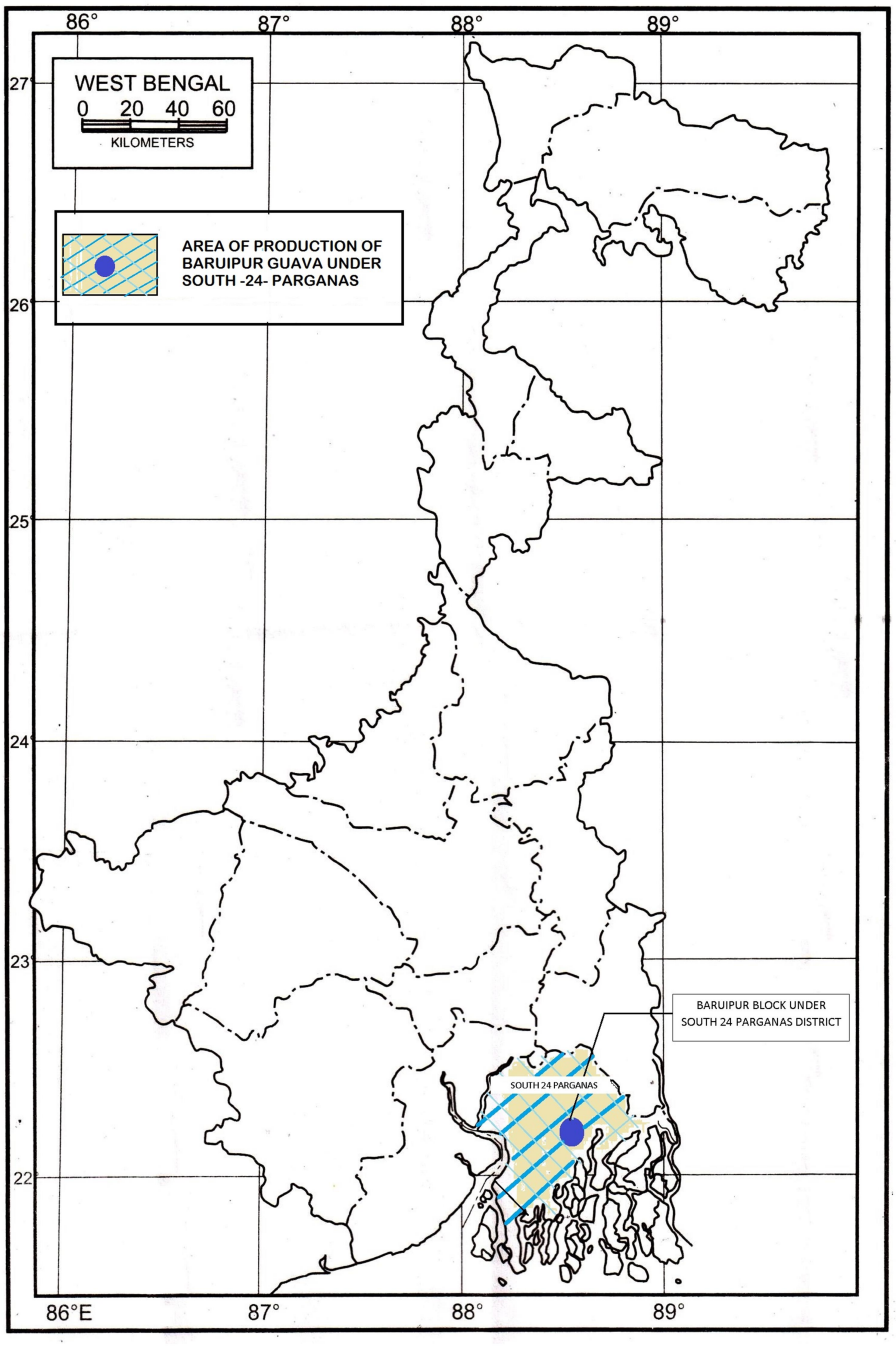
K) Inspection Body:

1. Representatives of Department of Food Processing Industries and Horticulture, Govt. of West Bengal
2. Representatives of West Bengal State Food Processing and Horticulture Development Corporation Limited (WBSFP&HDCL)
3. District Horticulture Officer of South 24 Parganas, West Bengal.
4. Representative of Department of Science & Technology and Biotechnology, Govt. of West Bengal.
5. Representatives of Patent Information Centre, WBSCST, Govt. Of West Bengal
6. Other Agricultural and Horticultural Experts in the field and Industry

L) Others:

Uses: 'Baruipur guava' is an indigenous fruit variety of West Bengal. It has been used as raw fruit to consume and also in salads. It is rich in Vitamin C and energy. Guava is also popular for its antioxidant property. In fact guava leaves can also be used as good source of antioxidants.

ANNEXURE 5: LOGO & MAP OF BARUIPUR GUAVA (1062)



MAP OF BARUIPUR GUAVA

General Information

What is a Geographical Indication?

- It is an indication,
- It is used to identify agricultural, natural, or manufactured goods originating in the said area,
- It originates from a definite territory in India,
- It should have a special quality or characteristics unique to the geographical indication.

Examples of possible Geographical Indications in India:

Some of the examples of Geographical Indications in India include Basmati Rice, Darjeeling Tea, Kancheepuram silk saree, Alphonso Mango, Nagpur Orange, Kolhapuri Chappal, Bikaneri Bhujia etc.

What are the bebefits of registration of Geographical Indications?

- It confers legal protection to Geographical Indications in India,
- It prevents unauthorized use of a registered Geographical Indication by others.
- It boosts exports of Indian Geographical indications by providing legal Protection.
- It promotes economic Prosperity of Producers.
- It enables seeking legal protection in other WTO member countries.

Who can apply for the registration of a Geographical Indication?

Any association of persons, producers, organization or authority established by or under the law can apply.
The applicant must represent the interest of the producers.
The application should be in writing in the prescribed form.
The application should be addressed to the Registrar of Geographical Indications along with prescribed fee.

Who is the Registered Proprietor of a Geographical Indication?

Any association of persons, producers, organization or authority established by or under the law can be a registered proprietor. There name should be entered in the Register of Geographical Indications as registered proprietor for the Geographical Indication applied for.

Who is an authorized user?

A producer of goods can apply for registration as an authorized user, with respect to a registered Geographical Indication. He should apply in writing in the prescribed form alongwith prescribed fee.

Who is a producer in relation to a Geographical Indication?

A producer is a person dealing with three categories of goods

- Agricultural Goods including the production, processing, trading or dealing.
- Natural Goods including exploiting, trading or dealing.
- Handicrafts or industrial goods including making, manufacturing, trading or dealing.

Is registration of a Geographical Indication compulsory?

While registration of Geographical indication is not compulsory, it offers better legal protection for action for infringement.

What are the advantages of registering?

- Registration affords better legal protection to facilitate an action for infringement.

- The registered proprietor and authorized users can initiate infringement actions.
- The authorized users can exercise right to use the Geographical indication.

Who can use the registered Geographical Indication?

Only an authorized user has the exclusive rights to use the Geographical indication in relation to goods in respect of which it is registered.

How long is the registration of Geographical Indication valid? Can it be renewed?

The registration of a Geographical Indication is for a period of ten years.
Yes, renewal is possible for further periods of 10 years each.
If a registered Geographical Indications is not renewed, it is liable to be removed from the register.

When a Registered Geographical Indication is said to be infringed?

- When unauthorized use indicates or suggests that such goods originate in a geographical area other than the true place of origin of such goods in a manner which misleads the public as to their geographical origins.
- When use of Geographical Indication results in unfair competition including passing off in respect of registered Geographical indication.
- When the use of another Geographical Indication results in a false representation to the public that goods originate in a territory in respect of which a Geographical Indication relates.

Who can initiate an infringement action?

The registered proprietor or authorized users of a registered Geographical indication can initiate an infringement action.

Can a registered Geographical Indication be assigned, transmitted etc?

No, A Geographical Indication is a public property belonging to the producers of the concerned goods. It shall not be the subject matter of assignment, transmission, licensing, pledge, mortgage or such other agreement. However, when an authorized user dies, his right devolves on his successor in title.

Can a registered Geographical Indication or authorized user be removed from the register?

Yes, The Appellate Board or the Registrar of Geographical Indication has the power to remove the Geographical Indication or authorized user from the register. The aggrieved person can file an appeal within three months from the date of communication of the order.

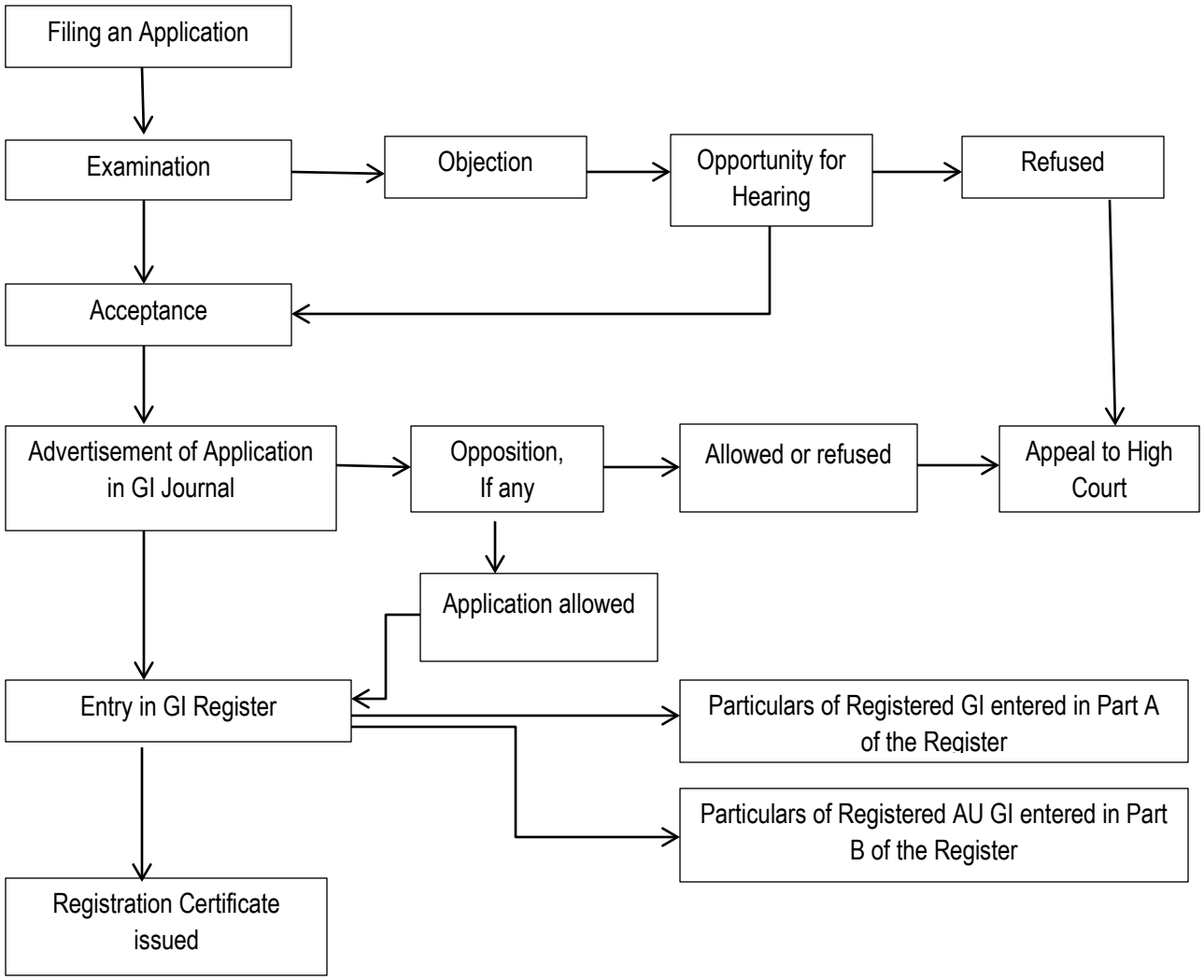
How a Geographical Indication differs from a trade mark?

A trade mark is a sign which is used in the course of trade and it distinguishes good or services of one enterprise from those of other enterprises. Whereas a Geographical Indication is used to identify goods having special Characteristics originating from a definite geographical territory.

THE REGISTRATION PROCESS

In December 1999, Parliament passed the Geographical Indications of Goods (Registration and Protection) Act 1999. This Act seeks to provide for the registration and protection of Geographical Indications relating to goods in India. This Act is administered by the Controller General of Patents, Designs and Trade Marks, who is the Registrar of Geographical Indications. The Geographical Indications Registry is located at Chennai.

The Registrar of Geographical Indication is divided into two parts. Part 'A' consists of particulars relating to registered Geographical indications and Part 'B' consists of particulars of the registered authorized users. The registration process is similar to both for registration of geographical indication and an authorized user which is illustrated below:



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